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ABSTRACT

This report of a conference cosponsored by the National Rehabilitation Information Center and the Clearinghouse on the Handicapped provides background on the need for a network system to make effective use of the Rehabilitation Services Administration (RSA) funded information services, defines and explains networking concepts and terminology, and describes representative information activities of future network members. Transcripts of presentations propose and provide supporting information for a Rehabilitation Information Network, with particular attention given to an explanation of the structure and services of the National Rehabilitation Information Center (NARIC). A directory of rehabilitation information resources focuses on the information activities of organizations represented at the conference, with information on services available, user groups, and contact information. Appendices include a resolution to support a rehabilitation network, the conference agenda, and a list of attendees. An appended concept paper addresses the problems and needs of disabled citizens, indicating the scope of their problems and unmet needs, and recommending new approaches in Federal legislation and administrative action to deal with these problems. (CWM)

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PROCEEDINGS OF THE
REHABILITATION INFORMATION NETWORK CONFERENCE

JUNE 8/9, 1978

With Program Descriptions of
Rehabilitation Information Resources

Cosponsored by

The National Rehabilitation Information Center

and

The Clearinghouse on the Handicapped
Office of Information & Resources for the Handicapped

Prepared by

The National Rehabilitation Information Center
The Catholic University of America
Washington, D.C. 20064

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"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Judith J. Senkevitch

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

"I am reminded here of an actual event, a story told by Professor Herbert Feigl, a Viennese philosopher of science, who reported that in the days when *ether* was hypothesized to extend throughout all space, a skeptic raised the question, 'suppose we were to move the universe five miles to the east, so to speak, in relation to this ether--could we tell the difference?'

The proponent of the concept had to confess that we could not. There were no available scientific operations that could be performed to ascertain any resulting difference; and from this Professor Feigl derived the following principle:

'If a difference does not *make* a difference, it is *not a difference!*'

The point is that we want the network to make a difference."

BG, p. 15

PREFACE

When the Rehabilitation Information Network Conference convened on June 8, 1978, in Washington, D.C., many participants felt that this was a landmark meeting--a significant step in the establishment of a rehabilitation information network. In keeping with its long-standing commitment to increase the utilization of research and knowledge relevant to rehabilitation, the Rehabilitation Services Administration (RSA)/DHEW funds a number of activities to disseminate information to the field. The two day conference, cosponsored by the National Rehabilitation Information Center and the Clearinghouse on the Handicapped in what is now the Office of Information and Resources for the Handicapped/DHEW, brought together many of these RSA-funded information providers and information specialists in the State vocational rehabilitation agencies to work together to develop a system--a network--to make more effective use of RSA-funded information activities. The meeting also offered participants a chance to explore ways of establishing a broader rehabilitation information network, including non-RSA-funded information activities, which could help all of us provide better information services to disabled individuals and rehabilitation professionals.

Conference participants worked to formulate a statement of goals, objectives, and services under which such a network would operate. A resolution supporting the establishment of a Rehabilitation Information Network was unanimously passed by participants at the close of the two-day session. Planning and Recommendations Committees were formed to continue work on the initial stages of RIN development. The outcomes of that work will be reported in subsequent publications.

The *Conference Proceedings* provides a means of sharing the major addresses and presentations made during the Conference with a larger audience. This publication is intended to serve not only as a written record of the proceedings, but also as a planning tool which conveys the conceptual background and mandate for the rehabilitation information network. Parts I (*Addresses*) and

II (*Presentations on Projects*) provide background on the need for a network, define and explain networking concepts and terminology, and describe representative information activities of future network members. This portion of the *Proceedings* should be useful to policy makers and planners, as well as administrators and others concerned with planning or maintaining rehabilitation information services.

The publication also includes a section of *Program Descriptions of Rehabilitation Information Resources*. Conference participants were asked to provide a summary of their organizations' activities, focusing on information activities and services available. These descriptions are included here with as little editing as possible. They are fully indexed, and are envisioned as the initial basis for a *directory to rehabilitation information resources* for use by those concerned with providing information on rehabilitation.

Since this section describing rehabilitation information resources results from the collective efforts of conference participants, it represents the first product of the Rehabilitation Information Network.

Judith J. Senkevitch, Director
The National Rehabilitation Information Center
January 1979

TABLE OF CONTENTS

	Page
I. ADDRESSES	1
Opening Address *Robert R. Humphreys*	3
Purpose and Objectives of the Rehabilitation Information Network Conference *Judith J. Senkevitch*	12
Background on Need for a Rehabilitation Information Network *Bertrum W. Griffis*	15
A State Agency Librarian's Views on Rehabilitation Information Problems *Lois Byrum*	20
Background on OHI/DHEW Clearinghouse on the Handicapped *Helga Roth*	26
Background on the National Rehabilitation Information Center (NARIC) *Elizabeth Stone*	31
NARIC's Services *Judith J. Senkevitch*	35
Slide Presentation on NARIC *Emiko Tanioka Lum*	37
Definition and Explanation of Network *Elizabeth Pan*	45
Synthesis of First Day's Meeting *Thomas E. Backer*	55
Impromptu Remarks *Richard LeClair*	62
Impromptu Remarks *Bertrum Griffis*	64
Synthesis of Conference *Thomas E. Backer*	66
II. PRESENTATIONS ON PROJECTS	71

Rehabilitation Engineering Center
Lawrence Scadden..... 73
Texas Institute for Rehabilitation and Research
Lex Frieden..... 76
Regional Rehabilitation Continuing Education Program
Blake S. Clark..... 80
Research and Training Center Information Exchange Program
David Sigman..... 84

III. PROGRAM DESCRIPTIONS OF REHABILITATION INFORMATION RESOURCES 89

American Coalition of Citizens with Disabilities, Inc. (ACCD)..... 91
Center for Continuing Education (Region V)..... 92
Clearinghouse on the Handicapped..... 94
Colorado Division of Rehabilitation..... 96
Deafness Research and Training Center..... 98
Emerging Issues in Rehabilitation..... 100
George Washington University Rehabilitation Research and Training Center No. 9..... 101
Georgia Department of Human Resources Library.. 103
Harvard-MIT Rehabilitation Engineering Center.. 105
Human Resources Center..... 107
ICD Research Utilization Laboratory..... 109
Independent Living Research Utilization Project (ILRU)..... 112
Indiana Rehabilitation Services Resource Center..... 114
Innovative Matching of Problems to Available Rehabilitation Technology (IMPART)..... 115
Massachusetts Rehabilitation Commission Library 117
Materials Development Center (MDC) Stout Vocational Rehabilitation Institute..... 119
Minnesota Medical Rehabilitation and Research and Training Center No. 2 (RT-2)..... 122
National Clearing House of Rehabilitation Training Materials (NCHRTM)..... 125
National Rehabilitation Information Center (NARIC)..... 126

Ohio Rehabilitation Services Commission Library..... 129
Pacific Regional Continuing Education Program (PRCEP)..... 130
Partners Rehabilitation Education Program (PREP)..... 132
President's Committee on Employment of the Handicapped (PCEH)..... 134
Region VI Rehabilitation Continuing Education Program (RCEP)..... 136
Regional Rehabilitation Continuing Education Program for Management & Administration... 137
Regional Rehabilitation Continuing Education Program of Virginia Commonwealth University (RRCEP/VCU)..... 139
Regional Rehabilitation Continuing Education Program/Virginia Dept. of Rehabilitative Services (RRCEP/DRS)..... 141
Regional Rehabilitation Research and Training Center..... 143
Regional Rehabilitation Research Institute (RRRI)..... 144
Regional Rehabilitation Research Institute on Attitudinal, Legal and Leisure Barriers (RRRI-ALLE)..... 148
Rehabilitation Administration and Management Programs (RAMP)..... 151
Rehabilitation Engineering Center (Moss)..... 154
Rehabilitation Engineering Center (Smith-Kettlewell)..... 156
Rehabilitation Engineering Center for Restoration of Function in Patients with Mobility Disorders..... 158
Rehabilitation Facility Administration Training Program..... 160
Rehabilitation Indicators (RI's) Project..... 162
Rehabilitation Interagency Linkages..... 164
Rehabilitation International Information Services (RIIS)..... 165
Rehabilitation International U.S.A. (RIUSA)... 167
Rehabilitation Research and Training Center No. 4 (RT-4)..... 171
Rehabilitation Research and Training Center in Mental Retardation..... 173

Rehabilitation Research Institute..... 175
Research and Evaluation BRIEFS..... 177
Research Utilization Laboratory (RUL)..... 180
Special Centers Information Exchange Program... 182
State of the Art Survey of Functional Limitations Project..... 184
Telecommunications for Concerned Citizen Involvement..... 185
Texas Tech Research and Training Center in Mental Retardation (RT-21)..... 187
University of California Center on Deafness: Research, Training, and Mental Health Services (RT-23)..... 189
University Center for International Rehabilitation..... 192
University of Michigan Rehabilitation Engineering Center..... 194
Veterans Administration Rehabilitative Engineering Reference Collection (153D).... 196
Virginia Department of Vocational Rehabilitation, Rehabilitation Research Information Center..... 198
West Virginia Research and Training Center (WVRTC)..... 200

APPENDICES..... 203
Appendix A: Conference Resolution..... 205
Appendix B: Conference Agenda..... 206
Appendix C: List of Conference Attendees..... 209
Appendix D: *Being Disabled in America* (A Concept Paper)..... 215

INDEX..... 243

I. ADDRESSES

OPENING ADDRESS

Commissioner Robert R. Humphreys

Information researchers and providers, state agency information specialists, counselors, educators, regional staff, ladies and gentlemen. Good morning. Welcome to Washington and to the Rehabilitation Information Network Conference.

I am delighted that we are gathered here today because I'm anxious to have a report on what you discuss here and because I would like to share with you a few views that I hold.

The goals that we've set for rehabilitation in the years ahead will be dependent in some large measure on effective information dissemination. Since last fall, I have, on a number of occasions, outlined my current thinking on rehabilitation and what I hope RSA and all of us working together can accomplish. Many of these thoughts are set forth in a concept paper that I have developed entitled *Being Disabled in America** which I understand has been distributed to you.

Rather than attempting to cover all the ground that is contained in that paper in the short time that I have with you this morning, I would like to describe a few of the major initiatives that I have in mind for RSA, to describe the new concept for RSA--which is a much broader one than it's been in the past--and to emphasize how much their success will depend on the ideas generated at this conference. I am, of course, always open to your suggestions, for we all have a common goal, and it's a noble goal. We're dedicated to improving services to the handicapped people in America--to respond to their real human needs, to restore them or bring them to full-

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*See Appendix D

ness to the extent that we can help do so, to help to enrich their lives, and thus enable those who are not presently in the mainstream of American life and society to enter that mainstream where they can realize their potential to the fullest, and thereby contribute to the enrichment of all our lives.

This is, in outline, our mission; and all our many initiatives are only vehicles or means by which we strive toward that goal.

RSA supports a variety of special centers and projects that disseminate information, provide related services and develop valuable information materials on specific topics. Many of those projects are represented by people who are here today.

On the whole, they have generated good products and services, but I think now we need to better coordinate these if they are to be fully responsive to the new tasks that are facing us. In terms of this conference, I think it's indeed true that we need to work toward an effective rehabilitation information network if we are to improve our services to the millions of handicapped citizens. And I want you to know that I fully support this effort. In fact, it is highly consonant and highly relevant to the general thrust that I have for RSA.

Among those primary areas under consideration these days by me and others is our legislation. As you may know, the House of Representatives has passed a bill, HR-12467, the Comprehensive Rehabilitation Services Amendment of 1978. That bill passed the House of Representatives on the 16th of May by a vote of 382 to 12. Clearly there is a perception on behalf of the Congress that something additional needs to be done for our handicapped population. The Senate also, in S-2600, has reported its bill and is expected after the current debate and filibuster, sometime, I would guess, around the beginning of July, to pass its legislation. And, hopefully, we'll have a final bill enacted before the end of the summer.

Among other things, that House bill includes two of the

three major initiatives which we set forth as a department and as an administration: first, project grant authority to provide independent living services. Second, a new employment opportunity proposal which expands the RSA-industry-labor partnership to provide entry level jobs to severely disabled people. And that proposal, incidentally, also supports cooperative commercial enterprises to be operated by people with disabilities and focuses on the need to field test, market, produce, and distribute equipment, aids and devices for the benefit of our disabled population.

The third initiative would establish a new community technical assistance program to help cities and counties maximize their resources to serve their disabled residents. And we are very hopeful that all these initiatives, including the last one, will be included in the final bill that's enacted later this year.

Incidentally, it's interesting to note that with the proposal of these three initiatives, RSA for the first time in more than ten years took the initiative in proposing new approaches--new directions--rather than reacting as we have in the past. And I think it's a very good sign.

It's my intention to continue to work for legislation that will be truly responsive to the needs of our constituents, and I believe that the good that will flow from such legislation is worth our every effort. It's clear to me that good information will play a vital role in the development of that legislation and in putting it and our current legislative efforts into effect.

One of the problems that I continue to address is that the Federal Government does not have a national policy on disability. We need to have one. We also do not have a comprehensive network of service delivery to all handicapped people. I think we need one. That network, as I conceive it, would provide a continuum of services for all handicapped people to meet the needs of the whole individual. Such a policy and such a network are

essential to the fulfillment of our common goal: quality of life for all handicapped Americans. And I believe there is a rational basis for assigning to RSA a premier Federal role, a lead responsiblity in planning, developing, and coordinating policy and service delivery with respect to all programs in the Federal Government for handicapped people.

The basis for this thought resides in the simple fact that RSA already plays a more nearly comprehensive role on behalf of the handicapped than any other agency of the government. And since our new legislation will emphasize this even further, we are certainly the logical candidate for such a lead responsiblity. Another legislative proposal we have made to further solidify the ecumenical and comprehensive mission of the new RSA is to bring the staff and responsiblities of the Office of Handicapped Individuals within RSA, hopefully, to be placed in our new Office of Advocacy and Coordination. RSA has lead agency responsibility with respect to the implementation of the recommendations of the White House Conference on Handicapped Individuals. We also have the lead role in the United States participation in the International Year for Disabled Persons of the United Nations.

So I think the focus in the Federal Government on programs for handicapped people and its assignment to reside within RSA is a logical and a necessary one. A consumer oriented National Disabilities Advisory Council will be established to help create this policy, and the Office of Policy Management will facilitate it and enable us to focus on long-term policy and propose courses of action through rational planning, and long-range and short-range planning, rather than merely reacting to crises as we have in the past.

This new office and the advisory council, along with the new Office of Advocacy and Coordination, if they all function as we plan, and I have every hope that they will, should enable us to work toward a national policy on disability, and, as I indicated, the corresponding comprehensive network of services that will enable our

nation for the first time to serve handicapped people adequately on all fronts.

In my concept paper I have referred to five levels of care that are essential to such a service network. They include prevention, maintenance, amelioration, habilitation and rehabilitation, with services to provide for all five levels of care. Some of these means are appropriate institutionalization where necessary for profoundly disabled people for whom there's no alternative, independent living rehabilitation for those who are able to utilize it, vocational rehabilitation for our traditional clients--and our traditional clients are expanding, as you know, through increased attention to more severely disabled people--and tied into that is the fact that independent living services will further enhance the ability of people who currently do not have a vocational goal to in fact attain one. And, finally, community based services to ensure a continuum of resources for all handicapped persons.

Now, this comprehensive service network needs to be soundly based, not only conceptually but empirically. The empirical foundation will be provided first by our Office of Advocacy and Coordination, through which we will have daily contact with groups, organizations and individuals, and in this way become more responsive to the actual needs of the handicapped population we serve. Part of that conceptualization of that office involves the establishment of what one might call desk officers--people who would have specific responsibility for specific disability area--who would be knowledgeable about all the program that relate to those particular disabilities within not only RSA, but throughout the Department and throughout the Federal Government.

A consumer hot line system will aid in this effort, and we're working on the development of that, as will further work we hope to do on client assistance projects. We are intent on expanding that process, and, also, the developmental disabilities protection and advocacy system.

Second, the National Disability Advisory Council will

have a strong consumer input, and so provide direct empirical data on which to base the service network.

Third, we need a national survey of disability and a national assessment of needs of handicapped people to provide up-to-date data on needs to create our service network.

I am hopeful and expectant that RSA can move ahead well and quickly in each of these directions.

I have included prevention in my conceptual framework for good reason, and I want to say a few words about it now, because in this area information may be the tool which does the most. We must not forget that for every handicapped person in America there are between seven to ten able-bodied persons, many like to say temporarily able-bodied citizens--and they too are a precious resource.

Certainly it is true that one of the great, original and constant concerns of rehabilitation has always been to prevent complications that may follow acute phases of accident or illness and related disorders.

In this sense, prevention was present at the very birth of rehabilitation; and I think the term should be used in its broadest sense. Certainly, I think that RSA should have a role in coordinating activities on disability prevention in terms of things such as disease prevention. We have had too little contact with the National Institutes of Health, the Center for Disease Control and other agencies that have specific responsibilities in disease areas.

Obviously we can't have a broad program of prevention without also having a truly effective rehabilitation information network. Although we may have some information available to us now--such as the kinds we derive as a byproduct of our service programs, for example--a total body of information on prevention has never been assembled, organized and carefully disseminated to the right target groups. It is possible, I am sure, to show a profound need for an information network to further

every aspect of rehabilitation. Much in this order will be done here during this meeting. I'm hopeful, too, that new thoughts and initiatives on how we can respond most positively to our information needs will be shared and developed as a direct result of this conference.

Just about all the initiatives that RSA is taking have implications for an information network need. For example, a comprehensive network of services for handicapped persons clearly calls for a network of information services. The national policy on disability must depend on and be guided by high-quality information. The same is true of advocacy, in which I am deeply interested, which has always been integral to rehabilitation, and which will be expanded. And if our hot line is to be truly and quickly responsive to the questions and needs of disabled people and professionals, we must have a wide variety of sound information at our fingertips, easily retrievable and ready to disseminate.

Finally, I might add, we also wish to affect public attitudes favorably on behalf of disabled people, and in this area sound, convincing information is certainly critical.

I hope this brief discussion with you has given you a general idea of the directions and the initiatives that RSA is undertaking and espousing. And I am hopeful that you, as you form into working groups today, will bring to bear on these problems and challenges all the capabilities of the information sciences, all the wisdom of networking skills, and all of your own best intuitions as people of good will. I'll be personally interested in the progress that you make in these two days and after this conference toward meeting this important goal. And I wish you an excellent conference and a productive one. Thank you very much.

Questions:

[*Has RSA prioritized its initiatives?*]

MR. HUMPHREYS: They're all priorities. We haven't narrowed them down to the extent that we can delineate whether one should be accentuated over another. At this point I see the need to go in a number of directions and I hope we're setting up the mechanisms to do that, and I think, first of all, however, that the essential priority is the establishment of a national policy. As a prelude to that, certainly we need to establish a policy within our own RSA framework; but in the work that we do on implementing the White House Conference recommendations and in other areas we will gather the experience which will be necessary to form the basis for such a national policy.

Do you see the interest in prevention carrying RSA into work with the younger-aged group than has traditionally been RSA's objective?

MR. HUMPHREYS: That concept is being worked on right now. I have a consultant on board who is acting as my special assistant. Her name is Eunice Fiorito. She was formerly president of the American Coalition of Citizens with Disabilities, and she is hard at work at developing the concept of the hot line. She has had conferences with a number of different groups and people including regional officials. She had a teleconference about three weeks ago with all of the regional office people. She is developing a concept paper on the hotline.

[*How soon will the hotline be implemented?*]

MR. HUMPHREYS: That depends on what Eunice reports. The hotline will be, I hope and expect, an integral part of the total advocacy system that we are establishing for RSA. I can't say at this point how soon such a thing can be implemented without knowing the specific details that will be involved.

Is there any one area in which you most urgently need input [by those of us here today? How can we help you to implement your initiatives?]

MR. HUMPHREYS: I think that more than anything else, we need to do a selling job on the Administration and on the Congress and on the American people as to what the needs are. We have to have information on what the needs are. We have to have information on what the gaps are to fill those needs. That, I think, is fundamental in our effort to begin to justify additional attention to be paid to programs for disabled people. Without that I think we'll pretty much carry on as we have in the past, fighting for our piece of the pie and quite often being either left out or being given the crumbs. I don't want that to continue. I think that the whole idea behind an RSA focus and a national policy is to bring to light for both the Administration and the Congress the necessity for focusing additional attention on the handicapped population.

Commissioner Humphreys heads the Rehabilitation Services Administration, DHEW.

PURPOSE AND OBJECTIVES OF THE REHABILITATION INFORMATION NETWORK CONFERENCE

Judith J. Senkevitch

May I express my personal pleasure at seeing you all here. I trust that you have come prepared to work, to share your ideas and expertise on the issues before us, and to listen to the ideas of others.

When we sent out the invitations to the Conference, included in the packet was a return mail response form which you could fill out to indicate whether or not you'd be able to attend. After a certain cut-off date, when there were still replies outstanding, Center staff began making follow-up telephone calls to confirm attendance and, also, to obtain additional information on programs and issues.

In the course of those telephone conversations, there were a number of ideas expressed, suggestions made, and certain questions raised about attending the Rehabilitation Information Network Conference: such as--

> "I agree that there really needs to be something done about information dissemination and rehabilitation, but I'm not sure where I fit in or how that relates to what I'm doing." Or--
>
> "I know what needs to be done; I've been talking about it for years and at all kinds of meetings but it hasn't done any good." Or--
>
> "I go to a lot of meetings, and I really think it's a waste of time. What's going to keep this one from becoming just 'another meeting'?"

I think the answer to that question and the key to the other questions is *YOU*. This is your chance to speak up *constructively* on the issues at hand and to work with your colleagues towards productive solutions.

The purpose of the Conference is to provide you, both RSA-funded information providers and information specialists from the state VR agencies, an opportunity to work together to develop a coherent system which would make more effective use of RSA-funded information activities. The Conference also offers you a chance to explore ways of establishing a broader rehabilitation information network, including non-RSA funded information activities, which could help all of us provide better information services to disabled individuals and rehabilitation professionals alike.

The need for such a network has already been identified and acknowledged. The very fact of this meeting reaffirms this general awareness. Specific background on the need for a more coordinated approach to information dissemination will be elaborated upon later by other speakers.

What exactly do we need to accomplish during these two days, and how are we going to do it? First, we need to arrive at an initial, viable plan for a network of RSA-funded information projects. This plan should include criteria for membership, objectives, a listing of most needed services, funding mechanisms, and any recommendations for implementation.

Secondly, the initial steps should be taken towards establishing a broader rehabilitation information network which would include both RSA- and non-RSA-funded information providers. This means that we need to formulate any recommendations for the initiation of such a network, identify possible members, and consider how best to contact them.

The Conference agenda is intended to help you work towards these goals. The presentations that you will hear this morning, and that you have already heard, provide background on the need for a rehabilitation information network. You will learn more about specific information activities of various projects which would constitute parts of a network. In her presentation this afternoon, Liz Pan will define "networking" and provide the basis for us for a common working vocabulary. You will then have the opportunity to break into small

groups to begin developing a plan for the network of RSA-funded information providers. Specific questions to be considered are: appropriate mission, objectives, and services for a rehabilitation information network.

The working session will provide an additional forum for discussion of the conference content and objectives. Conclusions from these working groups will be shared in summary form with the entire group tomorrow and will form the basis for tomorrow's work of expanding and refining the network plan. Today's presentations, as well as the program descriptions of participants, will be included in the published conference proceedings.

Ms. Senkevitch is Director of the National Rehabilitation Information Center.

BACKGROUND ON NEED FOR A REHABILITATION INFORMATION NETWORK

Bertrum W. Griffis

Ladies and gentlemen, the fact that we are all here in conference to consider and reflect on the information activities, resources, and services of RSA, and to consider also what may be required to improve them, is in my opinion highly constructive and most timely, because if we succeed in this enterprise we will thereby contribute much to the success of the many new initiatives RSA is now undertaking, and to the improvement of services to the handicapped people of America.

All this being so, I should like to acknowledge--and emphasize--that those who conceived and planned this conference have rendered a valuable service to RSA.

Now as may be seen by examining the list of participants in this conference, RSA funds a *variety* of projects "having an information resource component," as we say in Washington; and we want to consider now whether such a variety and combination of projects can, in a useful sense, be formed into a Network that will improve the information activities of RSA. That is the question.

I am reminded here of an actual event, a story told by Professor Herbert Feigl, a Viennese philosopher of science, who reported that in the days when "ether" was hypothesized to extend throughout all space, a skeptic raised the question, "Suppose we were to move the universe five miles to the east, so to speak, in relation to this ether--could we tell the difference?"

The proponent of the concept had to confess that we could not. There were no available scientific operations that could be performed to ascertain any resulting difference; and from this Professor Feigl derived the following principle: "If a difference does not *make* a difference, it is *not a difference!*"

The point is that we want the network to make a difference.

Now we do not claim that this array of information-oriented projects is ideal in relation to RSA's needs, nor to the needs of the handicapped people of America; nor do we claim that they have been funded in accord with any rigorously-adhered-to long-range plan. Even so, there is good reason to be proud of them for they have given us many good products.

At the same time, we need to be clearheaded and examine the projects with open eyes, otherwise we cannot know the nature of the elements that will go into the Network, nor can we really know why we have called this conference.

Now as to how this variety of projects in the general area of information came into being, we can only say--we can only remind ourselves--that just as the Founders of our country set out to form a more perfect union, yet in the end established a pluralistic society--so we have brought into being a pluralistic array of information-type projects.

In other words, we had in this instance a very sound precedent for what we did.

Speaking more seriously, we can say that RSA is itself a pluralistic organization. It has a pluralistic constituency of disabled and handicapped people, and multidisciplinary (read "pluralistic") processes for rehabilitating them. RSA also has many mandates--is undertaking many new initiatives--and has always tried to be as responsive as possible to these many demands. Moreover, the Congress that created RSA is also a pluralistic body. Finally, RSA has undergone many organizational and other trials and tribulations during the past 11 years; and what an agency does under such circumstances may later give an impression of undue pluralism.

For all of these reasons, RSA has funded a *variety* of projects having an information resource element.

I have compiled an annotated list of about 20 of our

principal information-type projects and activities, plus a summary sheet giving the FY 78 funding for each. I believe you have the list as a part of the conference packet distributed.

[The speaker then ran quickly through the following list, making a few remarks on the major projects involved.]

RSA Projects with an Information Resource Component (with budgets)

1.	Briefs	75,000
2.	Abstracting and Indexing	85,000
3.	NTIS	11,000
4.	NARIC	136,000
5.	Wisconsin Materials Development Center	240,000
6.	ICD RUL	169,000
7.	Chicago JVS RUL	128,000
8.	Woodrow Wilson Rehab. Center RUL	80,000
9.	Texas Rehabilitation Commission RUL	125,000
10.	U. of Arkansas RTC Information Systems Project	65,000
11.	National Clearinghouse on Rehab. Training Materials	105,000 est.
12.	IRI	105,000
13.	International Information Dissemination and Visitor Service Project, RIUSA, NYC	188,000
14.	International Exchange of Information World Rehabilitation Fund	140,000 est.
15.	International Exchange Experts World Rehabilitation Fund	140,000 est.

16.	International Information Exchange Built on Common Concerns for the Rehab of Handicapped People--U.S. & Africa	80,000 est.
17.	International Rehab Information Research & Dissemination Project	400,000 est.
18.	Wichita, Kansas REC *Tech Brief* Program	10,000
19.	Three RE Demonstration Laboratories	90,000
	Total	$2,372,000*
	International Portion	948,000

*Plus $100,000 for the Developmental Disabilities Abstracting Project.

If we include the $100,000 for the Developmental Disabilities Abstracting Project in the area of mental retardation, the total being spent per year on these 20 or so "information resource" projects and activities is $3,472,000, of which $948,000 goes for projects of this kind in the international area.

What can we say about all this? We can say, first of all that the total being spent on such projects is quite considerable. I am reminded here--irresistibly--of a recent occasion on which Art Buchwald was asked the following question at the end of a presentation: "Mr. Buchwald, you must have given serious thought to the national debt. It's becoming quite large, as you know, and the interest on it is spiraling. What do you think we should do?"

"I think," Buchwald replied, "that we should require those who are spending all that money to count it out dollar by dollar beforehand."

Suppose we were to try to draw one or two simple conclusions based freely and firmly on the facts presented regarding these 20 information-related projects. What would they be?

I think we can say the following: first, when we add it all up, we are really spending quite a bit on such projects in RSA. If we can afford to spend such amounts on projects

that we all agree are quite imperfectly coordinated, then *surely* we can also afford--and indeed have a real obligation--to *coordinate* them, or modify them if necessary so they can be coordinated into a productive Network.

Secondly, and more generally, I would repeat what I have said many times before: Somehow or other, we have never quite got round to utilizing the expertise and technical capabilities of the information sciences, nor have we been willing to commit the funds that are needed to approach our information problems *comprehensively* and to solve them *systematically*.

In other words, we have never quite got round to doing the two things most needing to be done.

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I see by my notes that I have drawn two or three additional conclusions, but in deference to the clock, and those who are trying to keep this conference on course and schedule, they can await another occasion.

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In closing, I should like to note that someone* has said that we are cradled in mystery every moment of our lives--but even if this is so, it remains desirable to have as much *information* about the mystery as possible. I hope we can have an information network that will organize our efforts in this whole area, and so make our information services more responsive to the needs of the rehabilitation community.

In other words, we want the cradle of mystery to rock as smoothly as possible.

Thank you very much.

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*Albert Schweitzer

Mr. Griffis is a Social Science Analyst, Division of Utilization, Rehabilitation Services Administration, DHEW

A STATE AGENCY LIBRARIAN'S VIEWS ON REHABILITATION INFORMATION PROBLEMS

Lois Byrum

In Minnesota state government we have a rather complicated interdepartmental arrangement for provision of library services to the state vocational rehabilitation staff members. When I say "we" this morning, I will usually be referring to Ms. Pat Tupper, who directs the library from which the services are provided, other library staff members, and to Duane Sermon and others of the vocational rehabilitation agency. I hope the context will make the exact references reasonably clear.

As I think about a network, it seems to me that the state vocational rehabilitation agencies are most often users of the type of information under consideration here, rather than producers, so that from a network point of view, the librarians and other information professionals who serve the state agency staffs are also users. Good state agency access to the information of rehabilitation is very important because it is needed to support the staff who deliver the services to the handicapped. Effective information service is not at all simple. Many things have been written about information dissemination and information utilization. My view is that people do try to solve problems when they recognize them, but not by running for KWIC indexes, bibliographies, card catalogs, and other information retrieval tools. Academic people may behave like that but probably only for academic problems. It is naive to think that many administrators and practitioners even have the time for such things. Their important role, anyway, is to *use* information. If they are to have that information, an effective information delivery system is necessary. At the state agency level, librarians and information specialists should be specializing in discovery or assessment of information needs, development of services, and retrieval of information to meet these needs. The staff member who wants to solve a problem is likely to discuss it with someone, and if there is a good information

service, he may talk it over with the librarian or information specialist.

I think people want relevant information when they recognize a need or possible use for it. It is often much too difficult for them to get it. This is true in vocational rehabilitation, no matter who they talk to, because despite some very good work that has been done, we still lack some elements of a good information system. It would be very difficult and expensive for one state to try to remedy this independently. We need to cooperate.

Minnesota state government is probably like many others--we now must watch costs more closely than we may have a few years ago. This means that to be effective we must also be efficient. I don't think savings should be made in interactions with staff members who need information. We are not spending enough time on this now. We have to make savings by cutting time spent on document processing. We have to take advantage of any savings that can be realized from use of microfilm, automation, and electronic communications. We also have to examine the shared savings that may be possible through cooperation in networks.

We need to know the information needs of the vocational rehabilitation staff so that we can justify necessary expenditures and eliminate unnecessary ones. In Minnesota we routinely spend quite a lot of money on information in various forms for the field staff -- we need to evaluate what we are doing in this area, to be sure that they have what they need and that we do not waste money.

Information needs assessment is a badly developed art and it is especially difficult to know the needs of staff members scattered across the state in many small offices. Ideally we should have a sophisticated study which looks at the tasks, behaviors, and performances expected of rehabilitation staff, and finds the points at which timely and appropriate information can improve delivery of services to the handicapped. One would be looking for unrecognized information needs or needs which the staff think cannot be met, as well as the needs they will mention. One would hope to find which general types of

information services are needed by which groups of staff, how rapidly, how crucial these needs are, where research results will be most welcome. From such a study we might be able to decide which needs require that information be immediately available in each field office, which are really training needs, which might be best served by having experts available for telephone consultation, which types should be served by routine or nonroutine information service from the library and so on. I think of information needs assessment as a state responsibility, but this group should be aware of it as a problem which may preoccupy us at the state level. Also, if we become more clear as to what information needs we have, we will make different requests of a network and of information producers. An information system has to be responsive to the actual needs of its users. I think we might find that we need better occupational information and that we should probably be influencing the development of the Occupational Information System being put together in Minnesota. I think we need more medical information for counselors. I know that we need easier access to information about what other state vocational rehabilitation agencies are doing, often about fairly routine things.

The Rehabilitation Services Administration and others in the rehabilitation community have produced some excellent informational materials and done pioneering work with the linker concept in the research utilization projects. These projects, the research briefs, and the RSA Research Information System with its outstanding abstracts, are aimed at the real problem of getting people to apply research.

But to apply all this in a state agency, we need some improvements. We need a better bibliographic retrieval system, we need better access to the documents themselves, and better contacts with the information producers, either directly or through a network. To put it more bluntly, information retrieval in rehabilitation is very bad and it interferes with meeting information needs.

One way of thinking is that each state agency is supposed to produce its own bibliographic retrieval system. In thinking about this, it helps to distinguish between

systems which provide retrieval of bibliographic data about documents and systems which provide for retrieval of documents from collections. These are often combined as they are in a conventional library card catalog. They do not have to be combined. Really good bibliographic data retrieval systems, which allow a searcher to search in many ways to *identify* documents which may contain needed information, are expensive and complex to produce. On the other hand a system limited to finding identified documents within a collection can be very simple.

For any collection of documents one has to have a simple document retrieval system, but it is not reasonable to think that the librarians in the state agencies should each independently produce a satisfactory bibliographic data retrieval system for the literature of vocational rehabilitation. ERIC now costs about $65.00 per document to produce. This is money well spent because so many people can then use ERIC, but it would be an exorbitant amount to spend for use within one state agency. We need a bibliographic data retrieval system we can share so that the costs do not have to be duplicated.

The Florida Rehabilitation Research Institute indexes and the RSA Research Information System index are examples of bibliographic retrieval systems which we can all use. In Minnesota the vocational rehabilitation librarian at one time produced KWIC indexes to part of the collection, which served for both bibliographic data retrieval and document retrieval. That was necessary at the time, but we now use the Florida RRRI indexes and the RSA index for the same purposes. This is much less expensive, and it gets us beyond the limits of our own collection. Incidentally, we distributed both the locally prepared KWIC indexes and Florida indexes to the field staff -- I do not think they use them. This is not a reflection on quality of the indexes, it just means that this is not a good means of getting staff to use information.

Still the Florida and RSA indexes cannot solve all our problems for us. We need a system which includes more material and is updated frequently. In Minnesota, we search ERIC, NTIS, and other databases from a computer terminal; these are useful for finding literature related to rehabilitation, but they do not cover the central lit-

erature of vocational rehabilitation at all well.

No printed index can provide the rapid, specific and versatile retrieval that can be provided by interactive bibliographic database searching at a computer terminal. The availability and cost-effectiveness of these systems really increase the amount of services a small library can provide to its users. I have wished in the past that there were an ERIC Clearinghouse in Rehabilitation. If it is not yet time to get the literature of vocational rehabilitation into such a database and make it available through Lockheed or one of the other brokers, at least what is done now should be compatible with eventual transformation to such a database. I think printed indexes and card indexes for serious literature will soon be obsolete, or at least secondary. I also think we will soon have many of what I call "electronic reference books" --for example, maybe within the next few years we will have the *Dictionary of Occupational Titles*, always up to date, through the computer terminal. We will then have to decide how many computer terminals to buy for the field offices.

On document retrieval --in Minnesota we don't have a complete collection of rehabilitation documents. We need to have the main body of the literature in microfiche, with frequently used ones also in paper. Since there are some we do not have in any form, we sometimes try to borrow through a large library network or try to locate them by searching the OCLC system. To use these resources we need standard bibliographic elements. There is now an American National Standards Institute standard for bibliographic citations and I think there is a COSATI standard. Such standards are not polite literary conventions --they are needed for document retrieval and exchange of bibliographic data in networks.

Actually the library networks which help us in many ways are not very helpful in rehabilitation because not many libraries have good rehabilitation collections. Possibly a network and the Clearinghouse will improve access to documents. Those of you who are producers of documents would do well to think of the information professionals in the state agencies as marketing representatives and be sure that we always get copies of your products.

We also need your cooperation if we call or write for information or documents.

Ms. Byrum is the Librarian, Minnesota Division of Vocational Rehabilitation

BACKGROUND ON OHI/DHEW CLEARINGHOUSE ON THE HANDICAPPED

Helga Roth, Ph.D.

The Clearinghouse on the Handicapped was created with utopia in mind--that it would be possible to have a one-place, push-button operation which could provide all the answers to inquiries in the area of handicapping conditions and related services. When I started to study the field and to map out who the potential customers and what their most likely information needs would be, it became very apparent that it was well-nigh impossible to think of *one* resource satisfying these needs even under the best of circumstances.

In order to set the stage and open your minds to the complexity of the field, I will quickly go down the list of who the possible information users and consumers are.

Information consumers include: the handicapped individuals and their families; the service personnel, such as medical specialists; rehabilitation professionals; special educators; bio-engineers; behavioral scientists; practitioners of different therapies; the administrators in service programs; the social planners at all government levels, local, state, and national; the legislators, again, at all levels; the educators who teach the service personnel and students; the researchers and scientists in many disciplines; the general public--the White House Conference participants were very insistent that the general public needs to know more about the handicapped and their problems in order to get more support; and, finally, the media specialists who, after all, write sometimes about the handicapped or what we do for them.

Now, these people have very different, and yet some overlapping information needs. Let us take a look at the needs. Information on available services; knowledge on handicapping conditions; coping techniques for problems posed by everyday living; products of rehabilitation

and bio-engineering, technical aids and equipment; legislation concerning the handicapped--interest is sky-high since 504; funding sources for programs; special education materials for students and teacher training; successful program innovations; basic and applied research on all aspects of handicapping conditions, which takes in almost all the institutes of the National Institutes of Health; prevalence in incidence of handicapping conditions; and resources for the handicapped--adapted housing, accessible transportation, and employment opportunities.

When you take all these fields and take the consumers I mentioned before, and realize that lots of these fields have to be packaged differently for different consumers, you begin to picture the complexity of information on handicapping conditions and related services.

One of the surprises coming out of the White House Conference was repeated recommendations for better access to research information. I, as an information person, had always thought that information in the research field is probably better managed than in most other fields. These recommendations were made because handicapped individuals are usually not participants in the circuit of research information. Research information is published in journals which are read by scientists. The handicapped individual wants to have this information repackaged so that the lay person can understand it. The National Institutes of Health do some repackaging, but very few handicapped individuals know about it.

This is another problem in the field of information. How do you let the people know that your services are available? How do you get the people who need to use your services, and that includes all the professionals in the rehabilitation field, to actually use the information? How do you make the horse go to the trough and drink?

Let's get back to the Clearinghouse. What could we do in this enormous complex field where we had absolutely no control of what kind of questions people ask of the Clearinghouse? In sheer self-defense we had to become

knowledgeable about who knows what so that, at least, we could make meaningful referrals. When we started our survey of national information sources serving the handicapped we asked, among many other questions, "What would you like to have the Clearinghouse do for you as an information provider?" Many groups answered, "Make our existence better known." Information providers also have the feeling that their services are not being used to the maximum.

The result of this survey fills a large book. It is called the *Directory of National Information Sources on Handicapping Conditions and Related Services*. You will not find all of the services you provide in that book.

When I was sitting there and heard that the Rehabilitation Services Administration alone can count up to 60 plus information services, I immediately started to tally up how many people will find themselves in our *Directory*. Not very many. That is a sign that your services were not well enough known to allow us to locate them through our many searches. We will rectify this situation in our next edition on which we will start work in a few months.

Getting to know who the national level information providers are did not only enable us to become referral agents with some competency, but also made us knowledgeable as to who tills the vineyard: some 225 private sector national information providers and between 45 and 50 federal operations giving some type of information in the field of handicaps.

What the *Directory* does for us, it also does for the many information providers who received it and who are using it: it facilitates knowledgeable referrals.

From the beginning, the entire publication program of the Clearinghouse has been focused on what is useful for all information providers. Besides the *Directory* we have published a catalog of *Federal Assistance for Programs Serving the Handicapped*--a funding guide all information providers need and can use. Our summary of legislation affecting the handicapped and the summary of key regulations saves others concerned in

this area the labor of putting together and printing such summaries.

Another important effort of the Clearinghouse is its attempt to become a catalyst and technical resource in the entire field of information on handicaps and to unite this field in a network of which your planned network on rehabilitation will be a part.

Our first networking effort was to invite information providers to a meeting devoted to discussing the information recommendations made during the White House Conference on Handicapped Individuals (May 1977). Many of the participants said it was their first chance to meet colleagues and to exchange experiences and learn about each other's operations.

We pursued the network idea in March 1978. We asked people who focus their information in the areas of architectural barriers, recreation and leisure, and education for the handicapped, to describe in some detail what they had to offer and how other information providers could make best use of their services.

We are happy that the Rehabilitation Services Administration took it upon itself to get the network of information providers on rehabilitation going. It will be one of the larger sub- or mini-networks to be connected with the national network in the entire field of handicaps.

We are here today to start the rehabilitation information network and to discuss how it can be best connected with the world outside. My role is that of facilitator, to feed into your network information related but not directly connected with rehabilitation and to build the bridges from your future network to all the other information providers.

I have talked so far only about the national level, but you know that information has a national, a state, and a local level. Some types of information are best handled on the national level. Research information is a good example. Information on innovative programs needs to be collected on a national level so that it can be disseminated throughout the nation. The best example of infor-

mation which needs to be handled on a local or maybe a state level is that on availability of a particular service a person needs. The closer the service to the person, the more welcome it will be in most cases.

The Clearinghouse has only begun to inventory information services for the handicapped on the state level. We have found a very uneven picture. There are some general information and referral services which claim they serve the handicapped like the rest of the population. There are some operations which focus on the needs of the handicapped. They are few and far between. There are information centers concentrating on the education of handicapped children. There are specialized ones for specific disabilities.

Our inventory of local information providers for the handicapped is even more rudimentary. Yet knowledge of their existence is vital to us when we have to mobilize local resources for assistance in specific *cases*.

I want to close with the expression of hope that the unit which RSA will establish to do the follow-up and monitoring of the implementation of the White House Conference on Handicapped Individuals will look very seriously on the many, many information recommendations which were made. We hope to be part of the progress which will be accomplished if we improve information service for handicapped people.

Dr. Roth is Chief, Clearinghouse On The Handicapped OIRH/DHEW (the Office of Handicapped Individuals is now the Office of Information and Resources for the Handicapped).

BACKGROUND ON NARIC

Elizabeth Stone, Ph.D.

I am delighted to be here today and have the opportunity of meeting you during these two days of our conference together.

The Catholic University of America is exceptionally pleased and honored to have located on its campus and in its library, the National Rehabilitation Information Center. The mission statement of the university says that one of its main aims is, and I quote, "serving the needs of human society". In meeting this aim it welcomes collaboration with other groups who also perceive themselves as having this type of unique responsibility for serving special needs of persons in our society today.

The Catholic University of America, with its uniquely advantageous location, close to the many rich resources of both the Federal and the private sectors, has developed a long-standing commitment to support projects not only in the areas of human and rehabilitation services but also in the development and improvement of information services and networks.

For example, the University houses diverse rehabilitation, education, and information activities such as: the Boys Town Research Center, the Developmental Psychological Center, a training program in speech and audiology, a special program in the School of Nursing that has to do with rehabilitation, and there are special courses in the school of architecture in barrier-free design of buildings. In the Graduate Department of Library and Information Science, both my predecessor (or chairman of the Department), and I have been long time members of the President's Committee on the Employment of the Handicapped. We have worked with one of the Conference participants, Larry Volin, and the library committee of that group for many years. In

addition, we have developed a special program to train library information and media personnel to better serve the needs of the handicapped. This has been accomplished with the consulting advice of Kurt Cylke, Head of the National Library Service for the Blind and Physically Handicapped, Library of Congress, and a professor each semester in our program. We call this program, "Mainstreaming Special Users". I was particularly pleased to see an article in a recent issue of the *Journal of Education for Librarianship* which focused on a survey that was made by an outside person looking at library and information programs throughout the country. The reviewer considered our program to be the most comprehensive in existence today in the United States.

We, in our Library and Information Science Department, have also had the experience of building an information network to meet specialized needs. It is called the *Continuing Library Education Network and Exchange*. The purpose of this particular network is to make available sources and services in the area of continuing education throughout the library, information, and media community nationwide, so that personnel in this area can keep up their competence throughout their lifetime of service.

From this experience I know how very difficult it is to achieve some of the things that Helga Roth and others have been talking about today. Namely, being sure that in your data base--in the information that you collect--you indeed have all the information that is relevant. This is very hard to come by regardless of how conscientious you are. In order to achieve as nearly complete utilization of this research information as possible, it's very hard to have people become, first of all, aware of what you've developed--this great network that you put your heart and soul into; then, secondly to have people become interested enough to look at it, to see whether it may be adaptable or useful to them; and finally, to have people actually decide to use your network on a regular basis so that all the effort is reaching the potential that you designed it to achieve.

However, I also know how rewarding--once you've gone through all this--such an experience can be. It's very

exciting to have the phone ring and be able to tell a person in our *Continuing Library Education Network* that, yes, in Oregon or Alaska or wherever, they can find a program which might give them training or information, or where they can learn to provide some type of special service for the handicapped.

In the establishment of our National Rehabilitation Information Center, I experienced just yesterday how personally rewarding the information you give can be. During our somewhat prolonged negotiations with the Planning Office at Catholic University on the location of NARIC, the secretary in that office had heard us tell about NARIC's objectives--that its services would be available not only to practitioners, researchers, and others especially concerned with serving the handicapped, but also information would be made available to the public and to any disabled person. About two weeks ago, the secretary cornered me as I was walking down the hall; she asked in a very plaintive voice if she might talk to me for a few minutes. What she described to me was a disability that her son had suddenly developed. She said, "I heard that this information service you are starting is for everybody. Does this mean that I could ask you a question and I might receive some information to help my son?" So I took her question to Sharon McFarland, who is our very capable information specialist at NARIC and gave her the problem. Sharon immediately, through a search in data bases and in the NARIC collection catalog, supplied me with pertinent information which I took to the person in need of help in our Planning Office. I didn't know whether it would be helpful or not, but yesterday, in walking through the parking lot, she came up to me. With tears of appreciation in her eyes, she said, "You have no idea what this has done for me. The information you gave me led me to some professional help and it really may make the difference of my son's life or death. I really can't thank you enough." This is just one personal illustration which has demonstrated to me that we must always think of the public-at-large and of our great potential for serving them and not just ourselves as practitioners and researchers and educators.

In summary, I would just like to say that the Catholic

University of America is committed to the extremely important concept of increasing the effectiveness of the rehabilitation programs which serve the residents of these United States, in an effort to meet their real needs and to enrich their lives by helping them to become productive citizens in the mainstream of our society. We are very proud of being able to join you in this common objective. Thank you.

Dr. Stone is Chairperson of the Graduate Department Library and Information Science at the Catholic University of America.

NARIC'S SERVICES

Judith J. Senkevitch

The National Rehabilitation Information Center, as many of you know, is recently funded by the Rehabilitation Services Administration, to collect, organize and make available a comprehensive collection of rehabilitation-related materials, audiovisual materials and documents, prepared under RSA contracts and grants.

This collection includes materials relevant to the rehabilitation of all disability groups, as well as materials of interest to rehabilitation administrators and practitioners. We also provide specific information services to the rehabilitation community, including disabled consumers, rehabilitation professionals, and concerned members of the public.

Anyone with a need for rehabilitation research reports and related materials is welcome to use the collection. You can call us, write or come in. The Center will provide on request, a copy of any document in its RSA collection. If there are duplicates available, a copy is provided at no cost. If not, there is a nominal charge to help cover the cost of duplication.

The National Rehabilitation Information Center will also provide at your request, bibliographies on topics relevant to rehabilitation, and will search other computerized data bases for you for relevant citations on a particular topic.

In keeping with its mandate, the Center is working with other rehabilitation information providers to help improve the delivery of information to the rehabilitation community. This conference is an example of such an activity.

The conceptual foundation for the Center project, NARIC, derives from the *Feasibility Study for a National Reha-*

bilitation Information Center, which was done here in Washington approximately four years ago. Findings of the study led to two major recommendations. One was for the establishment of the Center, and the other was for the formation of a Rehabilitation Information Network in which the Center was to play a role as catalyst and mobilizer. To help give you an overview both of the concepts behind the Center and of its present activities and services, we have prepared a brief slide presentation which I would like to show you at this time.

[Text of slide presentation with selected illustrations follows.]

Ms. Senkevitch is Director of The National Rehabilitation Information Center.

SLIDE PRESENTATION ON NARIC (THE NATIONAL REHABILITATION INFORMATION CENTER)

The story you are about to hear actually happened in Washington, D.C., within the past four years. It began when a typical practitioner in the rehab field was working hard to keep up with the developments in his area of specialization.

One day, while gathering the latest crop of jargon, he was suddenly caught in an information explosion.[1] He was rushed to RSA immediately where as soon as he came around, he told the staff the whole story.

"Yesterday, I had been dealing with topics such as *physically disabled, mentally retarded* and *mentally ill.* Today, I've found I have to cope with *prioritizing services,* serving the *severely disabled* and even with *research utilization.* All of a sudden, I thought about the future--and that's when it happened."

The staff checked his history. In the early days, rehab professionals like Billy Tate included counselors, supervisors, and administrators, who, for the most part, worked their way up through the ranks. But today, it is not unlikely to have psychologists, social workers, teachers, physicians, physical therapists and others as part of the rehab team.[2] Each specialist on this team represents a different, yet overlapping body of knowledge. The RSA staff could see that our practitioner's body had been seriously overlapped.

They checked the field where Billy had been working. They found that information relevant to the rehab

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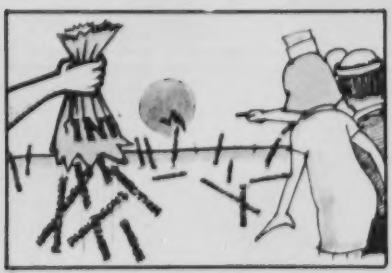
practitioner is available, but scattered and varied and, sometimes, poorly packaged....[3]

Rehab information was found in journal articles, research reports, monographs, abstracts, unpublished papers, films, slides, cassettes, tapes, videotapes, telecommunications and other forms. At that time, this information could only be gathered by writing to any number of sources such as NTIS, NAVC, ERIC, MDC, RRRI's, R & T Centers, university libraries, agency libraries and multimedia resource centers. The list goes on.

If the desired material was not available from a given location, referrals had to be made, and additional inquiries instigated.[4] There was no centralized repository of past or current RSA rehab materials in multimedia form accessible at the time of need.

The staff diagnozed the practitioner's case as acute *worditis*, and recommended that he get some processing help in the field immediately. So our hero went home and while he was recovering, he gave a lot of thought to this problem. Soon he was spending most of his time in his workshop, assembling various hardware and software components in different configurations.[5] Some enabled him to assemble information without too much trouble. Others aided in getting the information organized. But Billy wasn't going to be happy until he had a combination that would assemble, organize, and provide access to a definitive collection of published material, both print and non-print. It took him four years, but he did it.

"It's ready! It's ready!" he shouted, as he ran back out into the field. "What's ready?" asked the rehab



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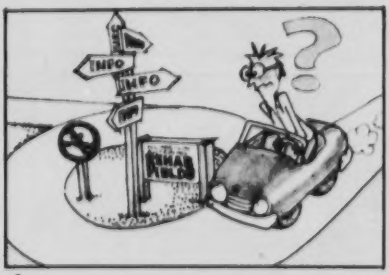

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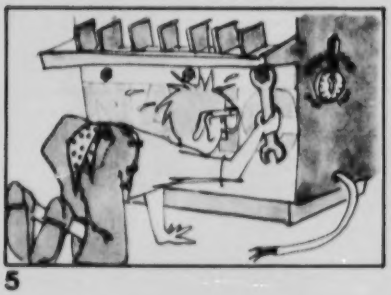
team. "NARIC, of course," said the practitioner. "What's a NARIC?" they all asked. "C'mon, let me show you!" our hero implored... and they all trooped into the barn.[6]

"Now this here is your RSA intake.[7] It is capable of digesting one copy of every document, published article, report, manual, audiotape or filmstrip arising out of any project or program supported by RSA or its predecessor agency from 1920 to the present time. Correspondence and other internal working memoranda would be excluded, but certain documents which contain information of potential general interest, such as state plans, might be acquired. It is estimated that such a collection at the current time would contain approximately 15,000 titles, including pamphlets and journal articles."[8]

There were gasps and whistles of approval from the team.

"Now, if I plug into this NTIS adapter on the RSA collector, selected materials will continue flowing over into the National Technical Information Service. By simply punching the code number here, it will come back to us whenever we want it, even in microfiche form." The rehab team was incredulous.

"Does it also show movies?" asked a team member, facetiously. "Funny you should ask!" said the practitioner. "The motion picture selector here, though somewhat limited in its selection, will show any film on the premises, available from the National AudioVisual Center."



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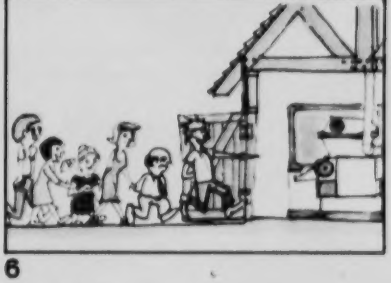

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"Now over on this side is your core collector, which will take books, journals, and other materials originating outside the RSA supported programs which might be useful for reference or consultation. It peels off the excess and leaves a core of 2,000 to 3,000 books and journals, and if that core isn't adequate, we can switch on other data bases like ERIC or MEDLINE right here."

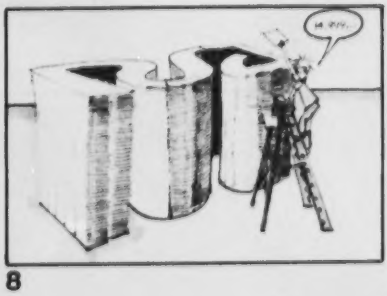
"And last but not least," said the proud practitioner, "is my console of user hardware."[9] With that, he exposed an array of buttons and monitors marked *videotape, closed circuit tv, audiotape, synchronizer, cassette viewers, slide projector,* and *film projector,* with a separate series marked *microfiche* to one side.

"Oh, let me look up my *favorite* subject," pleaded one over enthusiastic team member. And, for the first time, Billy's face fell.

"I wish I could," he replied wistfully, "but even with this computer ready to maintain an up-to-the-minute catalogue and print it out in any one of several versions, I haven't been able to figure out which subject headings to use."

"No problem!" assured a sympathetic soul. "I'll lend you my thesaurus to get things going. He's been feeding on rehab subject jargon since he was a pup, and he's just about ready to help retrieve a whole book or pamphlet, or any part of it you might want. I bet if you trained him right, with your computer there, you'd be able to retrieve an item by title, author, performing organization, or even by project name, LC number, or your own accession number without

7



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ever mixing up an RSA item with a core item."[10]

Well, there was such loud and general approval for this act of bold imagination and endurance, that the rest of the team immediately set about to help the practitioner figure out other ways to improve his NARIC.

"I'd be glad to assist users with on-site searches!" volunteered one. "I'll provide hard copy services while they wait!" said another. "I'll be glad to arrange for slide and filmstrip and videotape copy," said the third, "but for film, we'll have to refer elsewhere."

Once the team realized how important their personal touches would be in expanding the scope and quality of NARIC services, they began to talk headily in terms of fact retrieval service, using a network of experts as well as NARIC... and of exhibitions and of other outreach projects. These could demonstrate the need, potential, and accessibility of NARIC's services right in the field so that practitioners and disabled individuals alike would know how to protect themselves from the hazards of exploding information in their area. One member, the enthusiast of course, painted a dreamy picture of custom-tailored products ranging from simple abstracts to comprehensive state of the art reports.

"Now wait just a minute!" cautioned Billy. "It's taken me a long time just to get this far. Even with your help, I can't imagine being able to do all those things for every person in the field who comes along!"

The team agreed, and set about making a realistic plan

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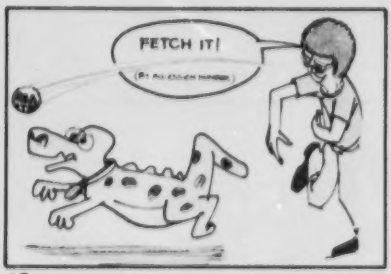

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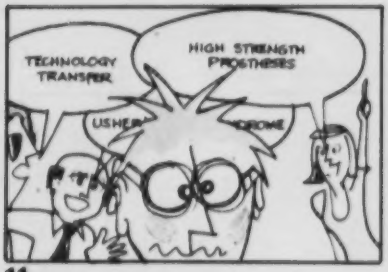
for the next five years. It began by building up the two main collections and the thesaurus, refining the basic set of services, and gradually offering these to an ever-widening public.

First, it was decided that any disabled person, concerned citizen, or rehab professional could be supplied with copies or bibliographies of any items in the RSA collection at nominal cost by simply writing or calling NARIC. Then they could begin to help administrators with fact retrieval services, and gradually phase in other groups. Finally, custom products generated for RSA administrators could be repackaged for other user groups.

That's when they really started to get into the needs of particular users. "What if an administrator wanted to know more about *program evaluation?*" someone asked. "That's a good point!" answered Billy. "We really should have a jack on this thing that would enable NARIC to connect that guy with an ideal source like ICD/RUL," and he quickly drew a diagram of it on his pad.

"What if a counselor wanted to know about tests used in *vocational evaluation*?" asked another team member. "Well, perhaps we can use an MDC jack," said Billy, thinking aloud. Before he could finish, he was deluged with questions from hypothetical parents, anxious to know about *Usher's Syndrome,* hypothetical planners eager for information about *federal efforts in technology transfer relevant to rehabilitation,* and hypothetical researchers jumping up and down to know what is currently being done in the development of *high-strength prostheses.*[11]



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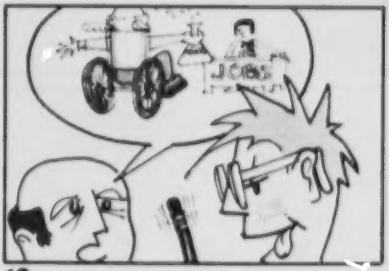

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The practitioner tried to keep up with the questions. "Either an NLM jack or a MEDLARS jack for that one; maybe both, then an NTIS adapter switch for that one... and, just a minute please, a line to SSIE on that one, and let's not forget the CLEARINGHOUSE!"

By now, his diagram looked like a bowl of spaghetti! Then someone threw him the clinker: "What if I am a disabled individual who wants to know whether there are any job possibilities for me in a science-related field?"[12] "Well, I suppose we can always connect the prestidigitator to the alternator and come up with a direct line to Access to Science," he mumbled, "but you know, the only way we're ever gonna get this thing to do anything for anybody is to start doing it," he added firmly.[13]

Billy went back to his drawing board to untangle the latest complications and try to draw them into one simplified network. The rest of the team saw that it was indeed time to stop pondering the hypothetical and to start spreading the good word. With brochures in hand, and their trusty thesaurus at their side, the rehab team ran back into the field and started shouting at the top of their lungs: "NARIC is ready! NARIC is ready."[14]

Every person in the field within shouting distance looked up and asked, "What's a NARIC?"

Prepared by the Connecticut Design Collaborative.

Presented by Ms. Emiko Tanioka Lum, Special Programs Coordinator for the National Rehabilitation Information Center.

13

14

DEFINITION AND EXPLANATION OF NETWORK

Elizabeth Pan, Ph.D.

Introduction

Four years ago, when Judy and I were working on the feasibility study for the National Rehabilitation Information Center, I would have given the chances of having a meeting to discuss the Rehabilitation Information Network to be about 1 in 10. And yet, here we are, thanks to the support and commitment of many individuals. I consider this meeting a milestone event and one in which I take great personal pride and satisfaction.

This morning you have heard Commissioner Humphreys express his views on how the Rehabilitation Information Network can play a vital role in his initiatives. You have heard other, more specific views from Bert Griffis of RSA and Lois Byrum from the Minnesota VR agency, about the need for an information network in rehabilitation. You now know more about the Clearinghouse/Office for Handicapped Individuals and NARIC, and yet, no one has tried to define what an information network is. That's because that is my task. Yours is to define what a rehabilitation information network will do.

My primary task today is to explain the basic concepts information networking and to provide a common working vocabulary for you to discuss the issues. After I describe *what* information networks are, I will discuss *why* they are formed, *how to* go about forming one, *how much it costs*, and *who pays*.

Most of you in the audience are already providing a variety of information services. You are the potential members of the Rehabilitation Information Network. Others in the audience are responsible for providing the basic support for the existing information services. And all

of us are information users at one time or another. It is most appropriate that these points of view are represented at this meeting for in a sense we are the partners in this venture.

Definition of Networks and their Characteristics

I would like to start by defining a network, or rather, to build a definition with you by reviewing its characteristics.

What is a network? According to the Oxford English Dictionary, the term *network* has been in use over four hundred years. At one time or another, *network* has been used to refer to "fishnets, cobwebs, fences, pebbles in pools, blind men with an elephant, the Emperor's new clothes," and generally, as anything "reticulated or decussated at equal distances with interstices between the intersections."

Obviously, we are not talking about fishnets or cobwebs. But what do fishnets and cobwebs have in common? In both cases there are interconnections. This is the basic idea about networks: A linking of parts to accomplish a common purpose.

When we refer to information networks we are talking about the linking of existing organizations whose primary function is the provision of information. The term *information* includes data or facts. By *provision* of information, I include both production and dissemination activities. The provision of information therefore refers to the production and dissemination of data or facts, and documents or listings of documents which contain the data or facts.

I would like to look at one type of information network that is familiar to all of you, the telephone network. Few of us can function effectively without a telephone, and all of us have, at one time or another, tried to escape from it.

When we think about the telephone network, we realize that the network really consists of discrete parts.

Each telephone company operating within a state or geographic area is an autonomous unit with its own organizational structure, resources and clientele. When these components are formed into a network, each component allows the use of its resources by others, but, at the same time, gains access to the resources of the network that would otherwise not be available to it. An R&D arm develops new technology and a manufacturing arm produces, installs and maintains the telephone equipment in the operating companies. An organizational structure, independent of the operating units which provide the telephone service, provides the overall management of the network. To facilitate efficient operations, protocols (or formal procedures) for accessing and using the telephone network are standardized. Directories for looking up the desired information are provided to the users of the network.

It is difficult for us to imagine a telephone service that is not provided through a network. Can you imagine, for example, having to go through all the states between New York and California every time you make a coast-to-coast call? Or having to learn different procedures for dialing a call depending upon where you are making the call? I think you will agree with me that life for all of us would be much less pleasant if this were the case.

Yet, this is indeed the case today in providing information services to the public in general and to the rehabilitation community in specific. The information consumer is faced with a myriad of information sources, each limited in its capacity to provide the services required, demanding that the user learn what is available from each source. Worse yet, every information source has created its own protocol for using its resources with little or no standardization, further confusing the user. It is no wonder that the typical user would rather pick up the phone and call a colleague when he or she needs information, and, only as a last resort, use a formal information source. Haven't you found yourself doing the same thing? The benefits of providing telephone service through a network are clear. We, the users of the service, are the beneficiaries.

I have so far described some of the basic characteristics of information networks using the telephone network as an example. I would like now to recapitulate some of the salient points before proceeding.

Information networks consist of independent organizations whose primary function is the provision of information. That includes most of you in the audience. If you join an information network you assume additional responsibilities by allowing the use of your information resources, but you also increase the resources that are available to you by gaining access to the resources of the other network members. You have to adhere to whatever standards are developed to facilitate access to the network and provide input into decisions that are made. In short you become part of a group working together for a common purpose. While each member of the network has something to gain, the end beneficiary is the information user. Service to the user is the reason why information networks are formed.

Now that we have some basic understanding of *what* information networks are, and *why* networks are formed, let us now turn our attention to *how to* accomplish the task of building a network. I have deliberately chosen the phrase *building a network* because it captures, better than any other phrase I know, the essence of the process of constructing from existing parts something that is different from the individual components.

The first task in building a network is to identify and bring together the potential members of the network. This meeting essentially accomplishes the first task, although additional potential members may be identified.

The second task in building a network is to define the objectives which all the potential members of the network can support.

I would like now to describe to you some objectives that are common to many information networks. You may find some, or all of them, relevant, in varying degrees, to the Rehabilitation Information Network. As I describe

each objective to you, ask yourself if the objective being described fills a need in the provision of information in rehabilitation. You will have an opportunity to express your views in the small group sessions which follow this presentation.

Information Network Objectives

Sharing resources

Many information networks have, as an objective, the sharing of resources, such as collections of documents, staff knowledgeable in certain subject areas, etc.

The mathematics of resource sharing is simple. If member A has access to the resources of member B, and vice versa, each will have access to total resources A & B.

Resource sharing usually requires a directory describing the information resources that are available and how to access them. Without such a mechanism, resource sharing will not be effective.

Resource sharing also requires the development of standards and formal procedures for communication and exchange of materials. This applies particularly to technology based products such as videotapes and computer produced listings.

Information exchange

While resource sharing increases the capacity of member organizations to provide information services, information exchange increases the competence of individuals providing the services. Information exchange is the kind of communication that often occurs at professional meetings, although other media, such as newsletters may be appropriate for reaching those who cannot attend the meetings. Information exchange may be informal communication among colleagues who are working on the same problem. A more structured type of information exchange is training in the form of workships and seminars.

User education covers a wide spectrum of activities. It includes activities to familiarize potential users with the information services and products that are available. These activities may be generally characterized as promotional in nature. Examples include brochures, news releases, full articles published in journals, exhibits and papers presented at conferences and the like.

User education also includes activities that are instructional in nature where certain skills for using a particular information product or service are taught, usually on a one-to-one basis. An example is the demonstration of literature searching performed at a computer terminal.

Promotional activities are normally designed to reach a large audience. The information provided about a particular service or product is general compared to instructional activities which are usually more appropriate when the user can define his or her information needs with some precision.

Coordination of existing services

In some information networks, specific areas of responsibilities are allocated to network members. For example, one network member may specialize in one subject area while another concentrates on another subject. Responsibilities may also be allocated by media or audience. Allocation of responsibilities facilitates resource sharing but is difficult to achieve because of conflicting and changing priorities not totally within the control of the network member.

However, more effective coordination of existing services can often be achieved by eliminating redundant efforts most of which result from ignorance of what others are doing and the lack of a mechanism to share the result of one's efforts with another's. Standardizing certain product specifications may allow network members to use the products developed by one member without having to repeat the work.

Needs Identification

Information networks can provide an effective mechanism for identifying and assessing the unmet needs of the users. In the course of providing information services every day, you come across requests that you cannot meet with your individual resources. You may refer these requests to other network members by using the network directory. There may be requests, however, that none of the network members are equipped to meet. These requests can be pooled and assessed periodically to determine the appropriate approach to take.

Linking with other networks

Networks, which consist of discrete parts that are linked together for a common purpose, may themselves serve as a node or component of a larger network. The rationale for building a network applies also to joining a larger network--increased effectiveness in providing information services. Neither the discrete parts of a network nor the networks themselves can function as effectively as independent entities as they can as parts of larger coordinated bodies.

I have described some networking objectives that you may wish to consider for the Rehabilitation Information Network. In my description of these objectives, I have mentioned certain products or services which assist you in attaining these objectives. Objectives are *what* you as network members may wish to accomplish. Products and services are the mechanisms for achieving specific objectives.

I would like now to turn our attention to the third task in building an information network. Your opportunity to provide input into this topic will be available tomorrow.

Network organizational structures can be viewed as a continuum of formality. At one end of this continuum are informal agreements to cooperate in one or more areas of mutual interest. Among libraries, for example,

there is an informal agreement that one library may borrow books from another library. This type of cooperation clearly extends libraries' ability to serve their users. There is no organizational structure to manage the operation. The only protocol is the use of standard forms and rules for borrowing books. The costs are modest and are absorbed by each participant although there is a growing trend towards charging a cost recovery fee which is passed on to the end user. This example is an information network in the most rudimentary sense.

At the other extreme of this continuum are network structures which are legal entities themselves, often in the form of non-profit organizations. As legal entities, these networks have certain capabilities to take actions such as entering into contracts, and are subject to government regulations and reporting requirements. Implicit in this structure are significant resources and staff, and usually, a specialized communications system that is based on the latest technology such as the computer. Network membership may be in the form of a contract where the obligations on both sides are clearly spelled out.

Somewhere between these two points is the vast middle ground where most information networks fall. In this type of network organization, the policies of the network are defined by a body which represents the interests of the membership. Although there may be a staff responsible for developing network services, much of the work may be carried out by individuals drawn from the network membership. Members communicate with each other about network developments through meetings and newsletters. There is usually no computerized data base but some protocols may be defined for accessing and using the network.

The three points I have described in the continuum of formality of network structures can be viewed as options for the Rehabilitation Information Network. What is appropriate for you depends primarily upon what you want the network to accomplish. In choosing your option, you

should consider the resources required compared to what is available, as well as the appropriate level of technology required by network activities.

This brings us to the next two questions I set out to answer: *how much* and *who pays*.

I cannot tell you in dollars and cents what it would cost you to join the Rehabilitation Information Network without knowing what you intend the network to accomplish and how soon you want these objectives to be implemented.

Independent of the question of costs, is the means of funding. I would like to describe several options. The first option is to have each network member absorb its own costs of participation in the network including the contribution of staff time to work on various network activities. The second option is a membership fee with each member assessed a standard fee or one that is based on some acceptable criteria. The third option is to purchase selected network services that are developed with grant funds.

I would like to point out that these options are not mutually exclusive. As a matter of fact, most information networks, particularly those in the middle ground that I described earlier, employ all three approaches.

Whatever the costs are, in evaluating them, I urge you to consider the costs of not forming a network. I would like to remind you of my earlier point about the deficiencies of telephone service provided by companies that are not linked together. Can we really afford to provide rehabilitation information independently of each other and without more structured means to cooperate? It is clear by your attendance at this meeting that you have felt some need for a rehabilitation information network.

The immediate task before you now is to formulate objectives and identify services that the network should provide. Each of you has been assigned to a group to accomplish this task. The group assignments are indi-

cated in your packet of materials. You will find that in each group, there is a designated group leader and recorder. The group leader's main responsibility is to keep the discussion focused on the task at hand. The recorder's job is to fill out the reporting forms which have been provided in the packet. The conference staff will be using these reporting forms to synthesize the results from all the groups and report these back to you tomorrow.

Dr. Pan is President, Institute for Information Studies.

SYNTHESIS OF FIRST DAY'S MEETING

Thomas E. Backer, Ph.D.

Earlier today we heard Bert Griffis challenge us to "make a difference" in building our information network. Each of our speakers so far has told us something about how to make that difference; how to create an information network that will have a real impact on rehabilitation services--and ultimately, to make a difference in the quality of life for our disabled citizens.

Helga Roth told us that we must work together to help recruit money and manpower for information services. Commissioner Humphreys told us that our information network can contribute to setting national policy for services to the disabled, and to generating a more complete network of services to assist disabled people--specifically, in terms of independent living, new employment opportunities, technological aids and efforts to maximize city and county services to the disabled. He also emphasized the role information services can play in providing urgently needed data on gaps in services now available to handicapped citizens; this information can be used in stimulating appropriate Congressional action.

Lois Byrum shared with us some of the problems local information providers, such as state VR agency libraries face, to which our network certainly could be addressed. Helga and Judy Senkevitch told us how the office of Handicapped Individuals Clearinghouse and NARIC may fit into the network; Bert Griffis reviewed some of RSA's funded projects, represented by many of their principal investigators and staff here today, that can contribute as well. And Liz Pan gave us some insights about how to set up an information network so that it will meet real needs, including its own internal requirement to survive and develop.

As I see it, successfully installing any new program

requires creating a social system to support it, and I think that's what we're doing here. Although the structure and the technology will be coming along in due time, what matters most now to the Rehabilitation Information Network is you--the individual people who can contribute to it--and I think that we lose sight of that simple fact at our peril.

When thinking about almost any new program designed to meet a long-standing need, one often wonders: why is it happening now instead of a long time ago? There may be many answers to that question, but one that makes sense to me relates to one of the most basic principles of psychotherapy--that behavioral change is motivated by feeling pain. People seek therapy, and work hard in it, usually when they subjectively experience enough pain to motivate real change--to take the risk of trying something new.

Pain in the sense of great need for information to solve urgent problems is evident everywhere in the rehabilitation field, and we've heard a lot about that today. The disabled need information about technological aids and about job opportunities. Counselors need information about new counseling techniques; agency administrators need information about new management tools; researchers need to know what their colleagues are doing--hopefully, to avoid reinventing the wheel. RSA needs information about gaps in knowledge and in service delivery. All of these audiences and more are clamoring for what our information network can provide more fully, more quickly, and ultimately, more economically, than any single knowledge resource.

Do we have the talent and the drive necessary to make the network a success in meeting these needs? Yes, I think we do. You've all evidenced your individual motivation by your willingness to attend this two-day conference, most of you using your own resources to do so. And the talent is certainly here. As I look around the room, I see pioneers in RSA's research utilization program, people like George Engstrom and Bert Griffis. I can see investigators whose recent professional lives have been devoted chiefly to the study of research utilization, such as John Muthard, Isabel Robinault--and the list goes on.

Many capabilities are represented here, and that's appropriate because one of the key payoffs that can emerge from our network is the energy that results from bringing together a diverse collection of talents. The whole truly can become more than the sum of its parts.

Liz Pan has outlined for us some ways in which that process can be structured; she mentioned sharing resources, information exchange, user education, coordination of existing services, needs identification, and linking with other networks as among the main objectives that the network may wish to address. She also has suggested some alternative mechanisms through which these objectives can be achieved. Some of them are relatively formal in nature; others are not.

In all, I think we've had a rather exciting, encouraging and somewhat tumultuous tapestry laid out in front of us today; a tapestry in which much of the weaving is yet to be filled in. And I think that our essential task now is to weave together people and information resources in order to turn our network into a stable reality.

Yet, at the same time, the Rehabilitation Information Network may fail despite this encouraging beginning. In particular, it may not survive unless we work *NOW* to build in a continuing responsiveness to user needs, a capacity to deal with problems as they arise, and continuing sources of nourishment in the form of both people's time and energies, and appropriate funding.

We've already heard some of the potential problems with which you, as the leaders of this network, have to grapple. At the conclusion of Liz Pan's talk, we heard questions raised about how the Rehabilitation Information Network will cope with the problem of evaluating the quality of information that is included in it. We have heard problems raised about how the network will assure real access for handicapped consumers to the resources that it may contain, and I think there are many other concerns--funding, coordination across geographical distances and so forth--that doubtless arose during your small group sessions. I'll be telling you

something about the overall input from the work group sessions tomorrow. A larger level of concern that I'd like to draw some special focus on, however, is the need to build into our emerging network a basic capacity to sustain itself over time. Many worthwhile innovations fall by the wayside despite the kind of initial success that we're seeing here today--the enthusiasm, the sharing of ideas, the sharing of resources that really can be of value in meeting the needs that we've identified. Innovations fall by the wayside because those responsible for developing them do not give adequate attention to the needs for *long-term survival capability*. Initial success, we find, does not necessarily mean that an innovation will be around if you come back to visit it or to use it two or three years later -- and that's not the kind of "success" that we would like to have for this network. If we all contribute our energies *now* and our resources *now* to its development, we would like it to survive. There is a continuing need that the network can meet; but in order to do so, it has to be around and that's a task easier said than done.

For the last three years, Ed Glaser and I, at our research institute, have been directing a program of research for NIMH which is concerned with the durability of innovations in human service programs. I'd like to share with you just a few of our findings because I think that they relate to what needs to happen with the Rehabilitation Information Network, *now*, in the initial planning stages, not later on, but right now, in the next day that we have to spend together. These are issues to which I think we need to give our attention.

In our research, we've studied innovations in the areas of program evaluation and clinical treatment in mental health. We've learned, among other things, that survival of new programs over time seems to be related to the following three critical variables: 1) continuing *adaptability* in response to changing needs in the population being served by the program; 2) continuing *championship* of the program by those instrumental in developing it; 3) *high-level endorsement* of the program by key policy makers.

High-level endorsement of our emerging network seems to

have been provided and provided quite enthusiastically this morning by Commissioner Humphreys, and I think that's a most encouraging start. However, I also think that we all need to be warned that keeping Mr. Humphreys, or his successors at RSA, thinking positively about this network will depend critically on to what extent the network is actually able to meet some of RSA's needs as an organization as well as the needs of all the other potential user audiences that I mentioned earlier. We would do well to ask ourselves how this network might be able to provide Commissioner Humphreys with the information he requested this morning about unmet needs and gaps in the rehabilitation system--information that he can then take to Congress.

The capability to respond to his urgent request truly lies within the membership of our network, but we have to give this task priority if it is to be completed. We have to think, also, about how the network can be designed to meet RSA's ongoing needs as an organization in addition to meeting needs of all of the other audiences that we agree we are aimed to serve.

Continuing championship also seems well in evidence among those in this room, and this provides a healthy starting place for our networking activities. However, what will be essential to the network's survival is what you do when you get back home--not just what you do here. *Fulfilling* the commitments made here is the key, and we all need each other's help in supplying mutual encouragement, even a kindly kick in the pants when that may be required, to keep the momentum going.

That's part of the function of a network, too--to help bring people closer together in a common mission so that they are able to motivate each other. We hope that you will take every opportunity to interact with your colleagues back home--to talk about the network, about how it can be brought to life, about what you accomplished, about what you plan to accomplish in the future as a member of this network. The network is not a single entity; it is not a place that exists at a geographical point. It is all of you, the resources, the projects, the organizations that you represent taken together.

We also need to be reminded that it is important to talk about potential problems, as well as opportunities. Unless those problems can be addressed head on, we're all in trouble.

Finally, let's take a look at the issue of adaptability. In the discussion tomorrow about what our final resolution stemming from this conference should be, I challenge all of you to consider what we are proposing in terms of the issue of flexibility of response to changing needs. What needs that the network would be asked to address are likely to arise in the future? How can the network respond to those needs, and what structures need to be built in *now* to do that--not just to meet the needs of today but to meet the needs of the future that we are able to predict at some level of confidence. What will be needed five years ahead that we can build in now? That is a most important question, and one that I strongly encourage all of you to consider in going over the plans, the thoughts, the beliefs and dreams that each of you individually may have about this network.

Also, as we're building our resolutions tomorrow, we must remind ourselves to keep those resolutions and plans precisely and succinctly stated so that they can be communicated to RSA and to our colleagues in the rehabilitation field. George Bernard Shaw once apologized for writing such a long letter--he said he didn't have time to write a shorter one! Let's try to take that time today to think about what we want to say in our resolutions tomorrow.

The more clearly focused we are on this task, the better we will be able to develop those resolutions tomorrow so that action is likely to flow from them. In his book, *Organizational Diagnosis*, Harry Levinson calls effective diagnosis and planning the royal road to success in organizational change. That thought is a good one to keep in mind as we move towards plans for a rehabilitation information network. The more we can anticipate problems and identify both the obvious and the subtle opportunities, the more we can focus on real needs that the network can meet, the better able we will be to bring this network to life and to keep it living over time.

In the end, information is of value only if it is used. Thus the ultimate goal of all of our planning and of all of the action we will take is to help get information used more fully to improve quality of life for the handicapped. We've made a good start in the first day of our conference, and I think we can anticipate an exciting and productive day tomorrow.

Dr. Backer is Senior Staff Associate, Human Resources Institute

IMPROMPTU REMARKS

Richard R. LeClair

Thank you for inviting me to make a few remarks at this significant conference. First, I wish to state that RSA has a vested interest in assuring that beneficial findings from all of its supported project activities are disseminated to every appropriate audience. In research alone, RSA has expended over 355 million dollars since 1967. Needless to say, we feel that such a large investment deserves a dedicated effort to ensure that handicapped individuals, rehabilitation professionals, policy makers, and others reap the benefits of the outcomes that result from this research and demonstration program. The transfer of knowledge is a major component of utilization, and we fully intend to encourage the development of a comprehensive information system that will reach all segments of the rehabilitation and habilitation community as well as handicapped individuals.

The group assembled here today represents the major resources in this country for distributing information to the rehabilitation community. NARIC is a relatively new member of this consortium and we sincerely hope that it will fill a major void that has existed in the present system. In helping to initiate NARIC, it was our intention that one of its major purposes would be to collect and be prepared to disseminate all research and demonstration reports supported by RSA. This in itself is a significant and extensive effort which will require several years to accomplish. Concurrently, it was also our expectation that NARIC would be aware of, and work in close harmony with other information resources as represented here today.

This meeting is a giant step in helping to develop an action blueprint for more effectively utilizing the information resources that are now available on various facets

of rehabilitation and habilitation programs and projects.

My very best wishes for continued success in this effort to enhance your combined capabilities for providing more extensive, comprehensive and timely information services as a means of improving the quality of life of handicapped individuals.

Mr. LeClair is Acting Director, Division of Utilization, Rehabilitation Services Administration, DHEW

IMPROMPTU REMARKS

Bertrum Griffis

I just wanted to note that someone spoke of lowered hopes, and would like to try to raise your hopes. Also, I'd like to pick up on something Tom said about what is *new*. One new item is that the Commissioner of RSA has said that he wants to help bring to fruition a new national policy on rehabilitation. There is to be a National Advisory Council, appointed by the President to come up with this policy. He has already appointed a staff person to coordinate the work of the Council. I think we have a very fine new Commissioner, a hopeful fact in itself. Since we are going to have a national policy on rehabilitation, I feel we need an information network that is isomorphic with that policy, and that also will be something new.

The Commissioner has also emphasized that he wants to have a comprehensive service delivery system for rehabilitation, and has reminded us that we have not had that up to now; and this, too, calls for the kind of Network we're trying to bring into being here today. So I think we have a very strong mandate for doing what we are trying to do here.

A third thing that I think is very new is that I detect in the background here what I would call the beginnings of a good Network conceptualization, and that is a big plus; for in spite of what I said earlier about the mystery encompassing us, I also believe that clarity, being a kind of cleanliness of the mind, is next to godliness. If we can be clear, and conceptualize well, we can move forward in spite of many unknowns.

I should like to say we are most indebted to Tom Backer for a very good, inspiring, and sound summary of the proceedings; and to the working groups for providing him the raw data for pulling it all together.

I have attended many meetings of this kind, and I am

very favorably impressed by what has happened here up to now, and feel that if our plan is properly presented to the Commissioner very significant things can happen. Someone has raised the questions, "What can NARIC do?" and "What can it not do." I would simply say that it does not yet appear what can be done, by which I mean there are no specific limits. Many good and useful things that are not yet evident can surely be accomplished, not only by NARIC but also by the companion efforts noted.

Thank you very much.

Mr. Griffis is a Social Science Analyst, Division of Utilization, Rehabilitation Services Administration, DHEW

SYNTHESIS OF CONFERENCE

Thomas E. Backer, Ph.D.

I would like to begin by referring again to the resolution we adopted earlier today. You now all have a copy of this resolution, and it is the first concrete product of our conference. More importantly, it is the first action of our newly formed Network. This resolution is the first thing that we've done together, the first product that we can look at and say, "Hey, this belongs to all of us!"

It is a strong, positive statement, I think. It also is, admittedly, quite general; but it is a useful start in that it announces our position and our commitment to take action about the Network.

We've also made some concrete plans for what will happen from here to bring the Rehabilitation Information Network to full life. We've established a Planning Committee and a Recommendations Committee. The prime task of this Committee will be to develop a set of action recommendations to submit to RSA, after first having these reviewed by all of the network members.

Also, under the direction of NARIC, a Conference proceedings will be published and distributed; this will serve in at least three ways to facilitate the further development of our Network. First, it will provide a written record of this event that we can all refer to as the months go by, to remind ourselves of what happened here. Second, it will serve as a preliminary resource directory that we can use in a very practical way when we have information needs in the future. We'll have a better idea of whom to call and what resources are available for us all to tap into. Third, the proceedings will serve as an announcement of the Network to the rehabilitation community at large, and beyond rehabilitation to other agencies such as those Dick Leclair mentioned.

Finally, we have been making plans for future actions. We talked about the possibility of developing a more formal *directory* of network resources that can be shared at least among our membership, and, perhaps more broadly, to identify what we can do for each other and what we can do for rehabilitation organizations nationally.

We've talked this afternoon about the possibility of another meeting, about what its purposes would be, when and where it would be held, and the Planning Committee will submit to you some nominations for that potential next meeting.

These represent issues yet to be resolved, but I think these and many others *will* be resolved by our Planning Committee and our Recommendations Committee, with catalytic assistance from NARIC, and perhaps some assistance from RSA over the next few months. For two days of meeting time, with a lot of information sharing mixed in with these concrete accomplishments, I think that we've done a lot.

Let's return just for a moment to the points that I made yesterday regarding the factors critical in promoting durability of new programs, such as our Network. I think one of the most common concerns that I've heard over the last few days is about the real possibility that this Network will simply fizzle out, once the enthusiasm of this meeting dies away. That's not an easy or pleasant observation to make, but it's a reality concern, and I think we need to address it head on. It *can* happen. Whether or not it *will* happen, quite frankly, depends on all of us, individually and collectively. It depends on your continued enthusiasm for and support of this Network. Durability, therefore, is a joint responsibility of everyone in this room today and, also, of whomever among our colleagues, we invite to join the Network in the immediate future.

The four critical factors regarding long-term survival that I mentioned to you yesterday were, *adaptability; continuing championship; high-level endorsement;* and *diagnosis* for advance planning.

I think we've built in a fair degree of *adaptability* at

this very early stage in our network, precisely because we've kept things informal. We have a small number of committees; membership of those committees is restricted which provides flexibility, and, I think, we've been careful, partly because of our time constraints here, not to overdo the planning process now. Even if we'd had more time available, I think some constraint on formalization at this point is appropriate because that will give us more options to consider in the future.

Championship will be provided by our committees and by the continuing enthusiasm of individual members of this group. I think that enthusiasm will be nourished by the delivery of the committees' reports to all of you, with an invitation for comments and feedback, by the delivery of our conference proceedings, by the delivery of a magazine article which Blake Clark has prepared about this conference, and other items that NARIC or other actors on the scene during the last two days here may be delivering to network members in the next several months.

High-level endorsements should be enhanced by delivery of our resolution to the Commissioner, followed by delivery of other products of this conference, such as our action recommendations. I remind you once again, however, that if we are able to move towards a direct information provision to RSA and to the Commissioner in particular (for example, in the area of service gaps and unmet needs), our chances of formal support will be substantially increased.

Finally, I think we've done a fair job of *diagnosis*, of anticipating problems that may arise in the development of our network. Thinking about this has not been an especially pleasant task, but it is a positive task because we are then afforded the opportunity to consider what we can *do* to avoid those problems, or at least to minimize their effects.

The committees that have been established will have a key role in this early phase of the network, in continuing and expanding this diagnostic effort. Some of the problems we have identified include the problem of territoriality, the problem of coordination of expansion of

the Network into other agency areas and other service areas--agencies which might include NASA, BEH, Developmental Disabilities, and so forth.

We've talked about the problem of funding. That's received a lot of attention. Who's going to pay for it if we decide to do more than we are doing now? We've talked about the problem of *quality* of information to be provided by Network members in the course of their activities as a member of the Network and our joint responsibility to be concerned with quality of information and its potential adverse impact. Finally, we've talked about the possibility of defusing enthusiasm among Network members over time.

I think we can all work together in attempting to deal with these problems, and we can expect and hope for support from RSA. I think we've been very fortunate to have Dick Leclair and Bert Griffis here now so as to recruit their help from RSA's research utilization division.

I'd like to close this brief summary with an observation from my own experience in facilitating organizational change. I think that it bears very directly on the problem of waning enthusiasm. The observation is simply this: *Change is hard.* What we're doing now is hard, because it involves change and involves ultimately, the reallocation of some of our priorities and resources and time and energies to tasks different than what we've been pursuing in the past. Inevitably, the process of establishing, bringing to full life, this Network will be difficult. That is another unpleasant reality, but one that I think we choose not to face head on at our peril. As we move into an era increasingly dominated by the need for accurate and timely information, we must change our capability of response in terms of information systems, information services, and information networks, or we will fall further and further behind in meeting human needs.

I return for closing to what's said in our resolution--it's the quality of life and work for our nation's disabled persons that is our ultimate concern here, not the quality of information per se. However, it happens that getting to that ultimate goal of improved quality

of life for the disabled requires the intermediate stage of high-quality, readily available information. It is for that reason that we must all take on the challenge of building a Rehabilitation Information Network.

Dr. Backer is Senior Staff Associate, Human Resources Institute.

II. PRESENTATIONS ON PROJECTS

REHABILITATION ENGINEERING CENTER

Lawrence Scadden, Ph.D.

It is my pleasure to be here. Most of the time, in the past few days, I've felt as though I were an observer. Now I can participate in this important Conference.

The Rehabilitation Engineering Center at the Smith-Kettlewell Institute of Visual Sciences in San Francisco is supported by RSA to conduct research, development, and evaluation programs related to sensory aids for the blind and visually impaired.

By *visually impaired,* we mean people who are not totally blind, but whose residual vision is too poor to permit visual functioning at a level comparable to the normally-sighted person. Most of our work is done with totally blind individuals.

Our projects can currently be divided into four major areas: Vocational Rehabilitation Engineering, Orientation and Mobility Research, Low-vision Research, and Evaluation of New Sensory Aids. In each project area, our activities can be divided further into the categories of basic laboratory research, applied research, and information dissemination.

I would like to talk about our research projects on auditory and tactile oscilloscopes: mechanical braille displays, which are attached to cassette systems and permit high density information storage; rapid retrieval capability for blind people; full vocabulary, speech output, reading machines; and expanded employment opportunities for the blind through the application of technology. That's what I'd like to talk about, but I won't.

Instead, I will tell you why this one scientist needs a viable rehabilitation information network. Most of my

comments will rely upon my own experience dealing with sensory aids for the blind and with blind people. However, I think that my comments could be substituted for most other scientists in rehabilitation engineering, and the term *blind* can be replaced with any other disabling condition.

With that in mind, I will proceed. For our research to have any value, our findings and products of research must be applied by practitioners and utilized by consumers. Research utilization, specifically *information dissemination,* and the *promotion of device production and distribution* demands a great amount of my personal time.

A viable rehabilitation information network could help me by providing the first half of this research utilization activity, specifically *information dissemination.* But to be viable, the network will have to do the job at least as well as I do now. That will require a full understanding of the *problems* and the *needs* of the individuals who request information.

The results from our research are disseminated to be either assimilated immediately or to remain as a resource for later attention by blind consumers, parents of blind children, rehabilitation counselors, placement specialists, educators, industry personnel--both employment office and line personnel--and the medical and applied health professionals. The material provided each of these groups must be in language--whether it be in written, in braille, or in some other form--which can be and will be utilized. It must be in a form that will not just remain on a shelf. The material must be used and it must be conveyed in the language which will communicate.

To date, I have not been pleased with the success of disseminating my research results through the publication of either full-length articles or brief research notes and journals. I've had much more success with personal communication which has been generated by oral

presentations at public meetings.

This has had, apparently, more impact on the rehabilitation process, and I base that upon my personal knowledge of the application of my research in the rehabilitation field. Perhaps the personal reading of the research results when the information has been disseminated by a network will have g eater impact than it currently does -- because the individual making the request has an immediate need. The results of research should not be merely stored somewhere in a journal waiting for somebody to discover it.

I believe a network can assist me in having a greater impact with our research because I need an expanded information exchange between scientists. This need could be addressed by a viable rehabilitation information network. Currently, before initiating a new research project, which inevitably will be very time consuming and very expensive, I try to find out what has been done in the past, what is being done currently or what is being contemplated by other scientists in the future in the specific area. So far I've been fortunate. I haven't reinvented anybody's wheel. But I have to say I am known in the scientific community and I do know many other scientists. We communicate informally on a regular basis. I continually receive similar inquiries for information from other scientists. However, I continually find people who have spent great sums of their own money and countless hours on their own duplicating the efforts of others. It has to be a very frustrating experience for these individuals. A viable rehabilitation information network must attain the large visibility throughout our country through public education using every form of popular media exposure to permit these basement inventors, if you will, to have the opportunity to avoid this frustration. More importantly, because of this public visibility, potential handicapped consumers will be able to find us--the scientists--through you, the network. Thank you.

Dr. Scadden is Director of the Rehabilitation Engineering Center at the Smith-Kettlewell Institute of Visual Sciences-San Francisco.

TEXAS INSTITUTE FOR REHABILITATION AND RESEARCH

Lex Frieden

I am from the Texas Institute for Rehabilitation and Research. Many of you are probably aware that we have a lot of things going on down there in Houston. TIRR is the home of a Rehabilitation Research and Training Center in cooperation with Baylor College of Medicine. We're also the home of a Rehabilitation Engineering Center in cooperation with Baylor and Texas A&M University and a Regional Spinal Cord Injury Center. In addition to these three major centers, we have a number of other independent and affiliated research projects and programs and service programs for handicapped people in the region--particularly in the Houston area.

Each one of these major projects is involved in research, training, and in direct service delivery--and here is where we begin to see the benefits of having a rehabilitation information network. Most of you probably relate to us either as a source of information; (you use some of the articles that we produce or some of the publications that we have) or you see us as a user of your services. We depend on each one of your projects to provide us with information. But, perhaps one way that you have not related to us is as a *provider* of information.

In the Houston area, there are about a quarter of a million disabled people who need information relating to their own disabilities, relating to goods and services, and so on and so forth. These people depend on TIRR because we do have a reputation for being a center for handicapped people in the community. As a result, TIRR continually gets calls from handicapped individuals who are looking for specific information. Calls come to the operators who refer these calls to whomever they feel

can provide the needed information. Consequently, those of us who are working on our own projects in our own offices sometimes are called upon to answer questions about specific details. Answering those requests is a very time consuming process. For us to do a good job answering them, we must often do additional research.

In an effort to systematize this process, TIRR started an information resources project several years ago which was sponsored and funded for only a few months. During that short time, most of the information that people wanted was of an individualized nature; "What can I do about my problem?" "How can I solve my individual problem?" This was the most time consuming of all kinds of information that we were asked to provide. We also discovered during this brief project that most handicapped people cannot simply be sent a book out of the library or a reprint of an article because they're not able to relate to that. They may not understand it. Some of them can't even read. That's probably the reason why many independent living centers have been developed around the country to provide practical information in a usable form.

At TIRR, we started a transitional living program two years ago called *New Options*. The New Options program is a six week live-in program for severely disabled individuals. Most of these people, to date, have been spinal cord injured people, cerebral palsied people, and people with other physical disabilities of this nature.

In the formulation and the conceptualization of this project, we asked ourselves: "What do we want to do during the six weeks?" "How can somebody gain most effectively from the experience and resources that we have at TIRR?" "With what can we connect to in other parts of the country and in other parts of the world?" and "How can we facilitate the independence of disabled people?" It became very clear, after a short period of time, that we could not produce a series of handouts or written materials that would be useful to people because

people come from different places and they go to different places, and specific information that might help them in one place is not necessarily going to help them somewhere else. The information about goods and services that we have in Houston may not relate to what is available in Dallas or Lubbock or Amarillo.

We came up with the conceptualization of a *process oriented* program. We try to help handicapped individuals learn how to find information for themselves, no matter where they are. People practice while they're in our program. They practice calling libraries, rehabilitation centers, and service agencies. They would like to be able to depend on a more systematized kind of information network, and I think that we're approaching that possibility at this point.

I caution you, in thinking about this network, that disabled people can be very demanding in their need for information. It's important to know how to screen people and how to screen inquiries. It's important as you begin to plan this system to look at the nodes that are already in existence, to see which kinds of services you can provide at the present time, and to see whether you can meet these demands.

As you begin to think in terms of expanding this system, you must think in terms of building in regional nodes. I think that TIRR and other centers like it, could make very fine regional nodes to the system that you're talking about establishing here. I think that we can begin to help translate information into a form that handicapped people can use, and I think that together, we can begin to meet the information needs of disabled individuals in our communities more effectively.

Finally, speaking from the standpoint of a disabled person, I'd like to thank those of you who we've been able to depend upon in the past. I know that ICD/RUL, the Clearinghouse On The Handicapped, the Arkansas R & T Center, and the rest of you have all been very helpful. We've been able to depend on you to provide information to us on a timely basis. However, it would be much,

much more helpful if you were connected and if we were more directly connected to you. There are a lot of handicapped people who do not now have access to you who need some of the information that you have in your repositories. With the proper kind of system or rehabilitation information network, a handicapped person anywhere in the U.S. should be able to use information from any of your libraries. The information should be available without a lot of waiting and without a lot of interpretation. I know this is a possibility. Now, I hope to see it happen.

Thank you.

Mr. Frieden is the New Options Research Director, Texas Institute for Rehabilitation and Research.

REGIONAL REHABILITATION CONTINUING EDUCATION PROGRAM

Blake S. Clark, Ph.D.

I would like to offer to you an overview about the Regional Rehabilitation Continuing Education Program concept and how I feel that it can relate to and be a part of a larger information network system.

The Rehabilitation Continuing Education process is relatively new--only in the last four years has it become operational. In talking to information providers such as yourself, I feel that you know what the Rehabilitation Continuing Education Programs are all about. However, I wanted to express to those of you who may not know about us, how we might be a part of this new information network system.

The program itself began in 1974, actually becoming operational, through RSA regional grants, to support and supplement existing state VR agency training programs. There was a feeling that significant duplication and overlap among or between the in-state programs existed, as well as an inability of any one state to generate enough resources, money, time, or staff to do a top quality job of training. It seemed natural for state VR agencies within a region to combine their talents and create a regional program that could supplement and support the on-going state programs, as well as provide other services depending on need. By the end of 1974, all Regional Rehabilitation Continuing Education programs were operational. These programs were regionally funded, RSA-based programs. Most RRCEP's were affiliated with universities and now function fairly independently of each other.

What RRCEP's do, primarily, is develop, conduct, and coordinate training programs of a continuing-need nature.

we are primarily involved in on-going professional development training and other staff development activities.

In this context, we are mostly involved with working from a regional basis rather than a state basis. We are doing training that involves all of the states in any given region. For example, in West Virginia, a need may exist to train VR counselors in dealing with Black Lung Disease. Yet this need may not exist in the D.C. or Delaware area and therefore would not be considered a *regional* need for RRCEP involvement. RRCEP concentrates on areas of training that are generic and relevant to any and all state agencies in a region.

Also, we are involved in the coordination of training activities throughout the regions. By that, I mean that we seek to find those other continuing education programs, R & T Center programs, special independent programs and other inservice programs and organize them into a published calendar so that all training resources can have information available about the nature, content, and schedules of all other programs. If, for instance, there is a training program scheduled in Virginia and we notice that the same type of program is to be held in Pennsylvania on the same dates, perhaps, we can influence them to coordinate with each other by suggesting, "Hey, let's get together and take the best of both for one good program."

Another major function in which the RRCEP's are involved is the consulting or technical-assistance-advice type of service that we offer to state in-service staff development training programs. Helping them to determine needs, to design programs, and to evaluate the results is a significant RRCEP contribution to the training field.

I'm very proud of the RRCEP progress that's been made in the last 4 years. We went through the same kinds of growing pains that I'm sure the Network will be

going through in terms of selling our ideas and concepts. We did sell ourselves, and we've come on like gangbusters in the last several years. We're no longer merely picking up pieces that have been distributed and strewn in our path, but we have taken hold of a situation and are looking towards determining present needs for training as well as future needs. We're able now to step into the future and set directions in a leadership role. We're making ourselves, I hope, indispensable to state agencies by involving them in every step of our planning and production. I am proud to say that the state agencies are now turning to us first for advice, guidance, and quality training. I hope this same degree of acceptance and success will be true for the Network.

As for the Rehabilitation Information Network structure I see the Regional Rehabilitation Continuing Education Programs somewhere between a user and a provider. I haven't been able yet to distinguish for myself where we will fit and I'll tell you why. We identified a need in our region to develop a caseload management training program. Representatives from all of the state agencies came together and said, "We need caseload management training, but we want it presented from a *managerial* perspective; we don't want to know how to take one case through the system." There wasn't, at that time, a lot of information on the topic of *Management Approaches to Handling Large Caseloads*, and what was to be pulled together was very, very difficult to find; most of it came from the management field. I wish I had known of a computerized system at that time where I could get on the telephone, call NARIC to plead, "Help me find out what's been done!" In the absence of an Information Network, I had no other choice but to create our own material by stitching together little pieces of information we found scattered around the country. Now, after two and one half years of work, we have a fine training program which focuses on the counselor as a manager. Now we have some information to share, and we are not the users any more but the providers. The result has been that RRCEP programs from all over the country have been in touch with us wanting to know what we've done, and we've been very

fortunate to be able to share that information. Therefore, I feel, as a training program contributor to this new information network we will see ourselves both as a user and a provider.

In terms of disseminating information, RRCEP's haven't done a very good job. We have held on selfishly to what we've developed, and its only been in the last year or so that we've been willing to let go and to start sharing. We have held three national conferences which have been a tremendous stimulus to us in terms of sharing resources. Once those geographic and political boundaries were crossed, we discovered that other programs were pretty good after all.

In terms of information distribution, some RRCEP's send out newsletters. Some of them sponsor information conferences on a regional basis. Some RRCEP programs put out master calendars of training events that take place all over their region. I'm proud to say that in Region III we do all three.

There may be other ways of getting together. An experimental way that the RRCEP's are dealing with now is training through telecommunications.

I'm excited about being here and particularly about being able to share with you what the potential is for the RRCEP programs as a part of this Rehabilitation Information Network. I think we can be of tremendous help in disseminating information and even in creating information of a training nature that can be plowed back into the Network.

Thank you.

Dr. Clark is Assistant Director, Region III-RCEP, Virginia Department of Rehabilitative Services/WWRC.

RESEARCH AND TRAINING CENTER INFORMATION EXCHANGE PROGRAM

David Sigman

The report that is being handed out should supplement this slide presentation. Included is a brief overview of the Information Exchange Program--the history of the program and its transition from The George Washington University Research and Training Center to the Arkansas R&T Center in 1975. The report also describes how information for various program publications is derived and in turn transferred to consumers and consumer groups, R&T Center personnel, libraries, universities, allied health personnel, state VR agencies, human resource organizations, international institutions, and members of a general audience.

First it seems appropriate to introduce the purposes of the Information Exchange Program, which are (a) keep the rehabilitation community abreast of the latest advancements, (b) promote the utilization of research findings, (c) encourage collaboration and cooperation, and (d) prevent duplication of effort. The Program's major focus is reduction of time lag between identification of problems, discovery of solutions, and practical application of new knowledge--goals that this group and the Information Network no doubt share.

In the beginning, Information Exchange staff decided to set up the Program much like any corporate identity program in the hope of giving everything published the appearance that it originated from the Information Exchange Program in Arkansas. Naturally this effort initially stimulated the development of our logo which was featured on the cover of our first new INFORMER.

To date over 3,000 readers are receiving the quarterly INFORMER, and approximately 2,000 copies of the *Research Directory for the Rehabilitation Research and Training*

Centers are disseminated annually. Also published in 1978 was the last edition of the annual *Training Directory* which has since been incorporated into the INFORMER as a quarterly RTC Training Calendar. Soon to be published is the *Publications and Audiovisual Aids Directory of the Rehabilitation Research and Training Centers* which will list citations of over 2,000 RTC publications as well as some 260 audiovisuals developed by or available through the 19 Research and Training Centers.

But what motivated this new format which has been applied to all Information Exchange publications? The answer is simple. Professional people in any field including rehabilitation have a tremendous amount of material which flows across their desks. Therefore, what they choose to read or not to read is of vital interest to the Information Exchange Program. For this reason, we decided to establish a magazine format for the INFORMER which could compete with the huge volume of periodic literature produced in rehabilitation today. Our initial goal was to give the INFORMER a personality and to make the publication interesting as well as informative.

First, we chose to divide the magazine into sections that would be easily adaptable to various kinds of information. Two primary sections are devoted to *Research* and *Training* news from the 19 Research and Training Centers plus the RRRI's, REC's, SCIC's, and the Helen Keller National Center (actually some 45 special centers contribute). A third section is devoted to *Editorial Information* which gives individuals a chance to express attitudes and concepts. These columns are entitled *Open Forum* and *Point of View*. Our *Personnel* Section is just what it implies. *Audiovisuals* and *Publications* provides quarterly listings of new R&T media productions and information on how to obtain them. The *Activities* section during the past year has included feature articles highlighting how we actually publish the magazine and how the magazine itself has become a tool for training. Coverage of the National RTC Association Conference in May will encompass an entire

special edition entitled the *Proceedings of the Second Annual Conference of the National Association of Rehabilitation Research and Training Centers* which will be disseminated nationally within 60 days preceding the conference. As mentioned earlier, the annual *Training Directory* has been replaced by the new quarterly RTC Training Calendar which will appear as a section in each issue of the *INFORMER*, providing a much more usable and timely format for training information.

The combined FY 1976/77 *Research Directory* is a very large publication, including abstracts on 417 RTC research projects. This directory will be a yearly publication with dissemination of the current edition anticipated in December. The *Publications and Audiovisuals Aids Directory* will be distributed at approximately the same time. Information inside these directories is related and organized with a focus on the overall goals or core areas for each RT Center in order to give the readers a broader understanding of the entire RTC network.

In addition to the Information Exchange publications just described, the Arkansas Rehabilitation Research and Training Center produces a number of in-house publications and products in an effort to broaden utilization of research findings at the Center. Also designed by the RT-13 Media Unit has been a modular information kit (a fancy name for a public relations package) which describes the Arkansas R&T Center. The advantage of a modular package is that the contents can be changed as the programs change. Thus a folder was developed with separate sheets describing separate programs (i.e., Research, Training, Continuing Education, IRI, etc.).

Our primary medium for transferring information is direct mail. But one problem with direct mail is that it can end up in a trash can. A solution to this problem has been an effort to send information which has multiple use. For example, a project that RT-13 recently considered and may implement in future is a quarterly Center newsletter with a poster on the verso.

After a person reads the newsletter, the sheet can be flipped and the poster hung on an office wall. The contemporary illustration or design would focus on a specific R&T program, for example, training. The newsletter side could carry a broad spectrum of information about R&T personnel and what is happening at the Arkansas Center, thereby giving State agency personnel, who usually see only the Center's finished products, an understanding of the entire process.

Poster displays are another way in which most Centers communicate ideas and generate program awareness among the rehabilitation community. RT-13 displays are designed to be visible and appealing as well as informative.

In summary, I'd like to express my personal views on packaging. Think about what information you read. In the past two days we've all discussed the tremendous amount of information that flows through our offices. The time you have is precious. It is absolutely essential that products are not just "banged out" on a typewriter, mimeographed and mailed, because these kinds of products most often are *not* read. There should be as much consideration put into packaging the material after the research is completed as was put into the research itself. A real barometer for successful media is the kind of material you choose to read. Simply watch the materials that come across your desks. You'll know whether or not the work that you are generating is superior or inferior compared to what you are receiving. If it is inferior, then you need to make some decisions about what you are doing and what you need to do in order to promote research utilization and thereby enhance the rehabilitation program nationwide.

Mr. Sigman is Supervisor of the Media, Materials Development and Dissemination Unit at the University of Arkansas Vocational Rehabilitation Research and Training Center.

III. PROGRAM DESCRIPTIONS OF REHABILITATION INFORMATION RESOURCES

AMERICAN COALITION OF CITIZENS WITH DISABILITIES, INC.
(ACCD)
1346 Connecticut Avenue, N.W., Suite 817
Washington, D.C. 20036

Frank G. Bowe, Ph.D., Director (202) 785-4265

Organization

ACCD is a nationwide umbrella advocacy organization representing virtually every disability. Founded in 1974, it serves as the focal point for national action on behalf of disabled people.

Major Activities

The Coalition is involved in concerns common to persons who are disabled, maintaining active ties with local groups of disabled people in all parts of the country.

Major Services

Through its current organizational network of some 76 national, state and local group members, ACCD can provide information and referral services in rehabilitation, employment, education, housing, transportation, civil rights, and mainstreaming in all facets of daily life.

The Coalition offers two major publications: *Handicapping America* ($10.95 plus $1.25 postage) and *Coalition Building* ($4.00 and $0.70 postage). ACCD also publishes *Action*, a monthly newsletter, and *The Coalition*, a quarterly.

CENTER FOR CONTINUING EDUCATION
Office of Rehabilitation Services, Region V
Multi Resource Centers, Inc.
1900 Chicago Avenue South
Minneapolis, Minnesota 55404

Gary E. Hines, Ed.D., Coordinator (612) 871-2402

Organization

Now in its fourth year, the Region V Center for Continuing Education is funded through an RSA grant to Multi-Resource Centers, Inc. (mrc), of Minneapolis, a private, non-profit human service facility which provides direct client services, professional staff development and community planning and research.

Major Activities

CCE provides post-employment continuing education services to personnel in the state vocational rehabilitation agencies of Region V. It also provides these services to private rehabilitation agencies which have a close working relationship with the State vocational rehabilitation agencies. A regional advisory committee made up of representatives from the state vocational rehabilitation agencies, private facilities and university counselor education programs assists CCE in its programs.

During its first three years, CCE provided direct training to approximately 6,200 persons; an additional 3,000 are expected to be reached within the next year.

Major Services

The Center offers a number of on-site training programs for personnel of state vocational rehabilitation agencies and private facilities that provide direct service to vocational rehabilitation clients. Continuing education

units are granted for full participation in accredited courses.

The Center also sponsors an annual conference for rehabilitation educators and trainers in Region V, featuring talks by major figures in rehabilitation and related disciplines. The conference also provides a forum for information and materials exchange, collaborative training exploration, in-service training activities sharing, and regional staff interaction on federal policy, policy, funding and procedural matters.

User Groups

A CCE training catalog and newsletter, *The Continuing Education News*, are circulated among Region V personnel.

CLEARINGHOUSE ON THE HANDICAPPED
The Office of Information and Resources for the Handicapped (OIRH)
Department of Health, Education and Welfare
200 Independence Avenue, S.W. - Room 338D
Washington, D.C. 20201

Dr. Helga Roth, Director (202) 245-1961

Organization

The national Clearinghouse on the Handicapped in OIRH seeks to improve the lives of handicapped individuals by enhancing the flow of information. It is located within the planning and coordination unit of OIRH, which in turn acts as an advisory arm to the Secretary and assistant secretaries of the Department of Health, Education and Welfare. Without programmatic granting or funding authority of its own, the Office serves as an advocate for all handicapped constituencies and for all types and levels of government services. OIRH also is charged with implementing the recommendations developed during the 1977 White House Conference on Handicapped Individuals.

Major Activities

The Clearinghouse has two major roles: responding to inquiries from handicapped individuals, and serving as a resource to organizations that deal with information for and about disabled individuals.

To answer inquiries the Clearinghouse often serves as a broker, putting individuals in touch with relevant information sources on national, state and local levels. Tools used in making referrals include a directory profiling approximately 300 national level information providers in the public and private sector, and growing Clearinghouse files on state and local resources. Several Clearinghouse-produced publications in the area of federal funding for programs serving handicapped indi-

viduals are also used in answering inquiries, as are copies of pertinent legislation and program regulations and a Clearinghouse newsletter.

Major Services

Recognizing that existing information resources are not sufficiently known and effectively utilized, the Clearinghouse is attempting to educate the public about information services, their capabilities and their limitations. One of its ongoing concerns and projects is the forging of a network among information providers at all governmental levels. A second program is to monitor developments in the field and to convene information providers from time to time to facilitate their sharing of needs, experiences and strategies.

User Groups

The Clearinghouse responds to individuals and organizations requesting information on the handicapped, frequently referring the request to the state or local organization best able to deal with the problem posed.

COLORADO DIVISION OF REHABILITATION
Department of Social Services
1575 Sherman Street
524 Social Services Building
Denver, Colorado 80203

Mark Litvin, Ph.D., Director (303) 839-2285

Organization

The Division of Rehabilitation is designed to develop and restore the working usefulness of eligible physically and mentally disabled individuals so that they may become self-supporting. It receives appropriations from both federal and state sources.

Major Activities

The division oversees the provision of services to eligible persons who might be made employable as a result of receiving those services, i.e., diagnostic examinations, necessary medical, surgical, psychiatric and hospital services, necessary prosthetic devices, counseling and guidance, vocational training, job placement and follow-up. The division is also involved in specialized services and projects to implement general rehabilitation practices, such as building construction, staffing and training.

Major Services

The division has no formal information sharing system for personnel outside its own division. It is open, however, to cooperate in any way possible toward the interchange of data and information with other states and organizations.

User Groups

The division serves exclusively residents of the State of Colorado.

DEAFNESS RESEARCH AND TRAINING CENTER (RT-17)
New York University
80 Washington Square East
New York, New York 10003

Jerome D. Schein, Ph.D., Director (212) 598-2305

Organization

The Deafness Research and Training Center was established in March, 1966 by a grant from RSA to New York University. Within the university, the Center is placed administratively in the School of Education.

Major Activities

The Deafness Center concentrates its rehabilitation research on the core problem of improving the delivery of services to deaf people. In this pursuit, the Center uses a multifaceted, interdisciplinary strategy on projects ranging from intensive studies of individuals to extensive surveys of the deaf population.

Major Services

A dual commitment to research and training underlies much of the Center's work. Six program areas define the research:

- Developing models for service delivery
- Developing the data base
- Communication research
- Vocation research development
- Deaf community development
- Personnel research and development

Training is divided into long and short term programs. The long term programs assist personnel fully qualified in their primary specialty to become conversant with the skills necessary to remediate problems of deafness.

Short term programs meet the immediate needs for additional training of persons already in the field, and to encourage greater participation by deaf consumers. (In addition to the intensive sign language program, the Center is also involved in the development of specialized sign languages, such as Spanish sign language.)

User Groups

Audiovisual materials and publications produced by the Center are available from the Center (addressed above), the Bureau of Education for the Handicapped, Washington, D.C., or the National Association for the Deaf.

EMERGING ISSUES IN REHABILITATION
Institute for Information Studies
400 N. Washington Street, Suite 208
Falls Church, Virginia 22046

Elizabeth Pan, Ph.D., Director (703) 533-0383

Organization

The Emerging Issues in Rehabilitation project will produce state of the art reports on topics of timely interest to rehabilitation personnel. Specific topics have not yet been selected but target audiences include 1) handicapped individuals, 2) service providers and 3) administrators/policy makers and legislative staff. Another objective of the project is to test and analyze the results of various marketing and distribution techniques for the products of the project.

The project is a three year grant from the Division of Utilization, Rehabilitation Services Administration/ DHEW. A similar project last year produced reports on independent living, sheltered industrial workshops, outcome measurement and national health insurance.

THE GEORGE WASHINGTON UNIVERSITY REHABILITATION RESEARCH & TRAINING CENTER NO. 9 (RT-9)
2300 Eye Street, N.W., Suite 714
Washington, D.C. 20037

Irene G. Tamagna, M.D., Director (202) 676-3801

Organization

RT-9 was established in 1965 by RSA in order to improve medical and vocational rehabilitation of the severely disabled. The focus of RT-9's research is "Psychosocial, Vocational, and Performance Capability Studies in Severe Disabilities."

Since 1965, RT-9's primary goal has been to improve the quality of patient care and client services through effective utilization of new research findings. The Center is primarily medically oriented, but the Center's personnel are drawn from the various clinical and basic science departments in the university. Departmental lines are crossed in order to bring to bear a multi-disciplinary attack on those inter-disciplinary problems which must be solved to achieve the total rehabilitation of the severely disabled person.

Major Activities

RT-9 sponsors four ongoing activities: a job development laboratory, a center for family research, a cardiac rehabilitation center, and the rehabilitation unit of the George Washington University Hospital. Current research studies or programs include:

- Identification of Communication Deficits in Patient with Right Cerebral Hemisphere Damage (RT-49)
- Emotional Responses in Subjects with Right Hemisphere Damage (R-52)
- The Role of the Family in Institutional Rehabilitation of Clients with Behavioral and Physical Disabilities (R-45)
- Counseling Needs of the Families of Aphasic Patients (R-53)

- Post-Coronary Group/Exercise Study (R-48)
- The Vocational Potential of End Stage Renal Disease Patients through Analysis of the Relationships between the Medical Factors of ESRD and Alternative Job Placement Strategies (SR-9)
- Human Engineering Factors Related to Disabilities: Use in Vocational Rehabilitation (R-50)
- Comprehensive Job Placement Models for State Vocational Rehabilitation Agencies (R-51)
- Training and Evaluation Program in the Utilization of Accessible Buses
- Identification of Psychosocial Variables which Affect Incidence and Outcome After Strokes in Working Persons (R-54)
- Identification and Quantification of Biomedical Variables which Affect Learning Behavior and Rehabilitation Outcome After Cerebral Injury (R-55)

Major Services

Dissemination of research findings and training materials are facilitated through the RT-9 catalog, which includes listings of available videotapes and journal articles, and a slide/tape recording presentation on RT-9.

User Groups

Training is offered at minimal or no cost to students in clinical and client service areas, medical students, rehabilitation practitioners and rehabilitation patients and their families.

GEORGIA DEPARTMENT OF HUMAN RESOURCES LIBRARY
321 State Health Building
47 Trinity Avenue, S.W.
Atlanta, Georgia 30334

(404) 656-4969

Organization

The DHR library serves as the Departmental professional Library/Information Center. Its purpose is to acquire and disseminate from relevant current literature, knowledge, concepts and techniques relating to the specific programs involved in human service delivery.

Major Activities

The Library owns 15,000 books, 3,000 bound volumes and receives 100 current journals. The major collecting areas are in health (both physical and mental) social services and vocational rehabilitation. The reference collection includes encyclopedias, directories, dictionaries, and various indexing and abstracting tools.

A concerted effort is made to be aware of and acquire copies of all departmental publications, as well as journal articles prepared by the staff. Many publications published by HEW's Public Health Service are routinely sent to the library. Staff members contribute publications which they feel may be valuable to the collection.

The library is a member of the Atlanta Health Science Libraries Consortium and the Southeastern Regional Medical Library Program. It shares resources with nine departmentally sponsored health science libraries located throughout the state.

Major Services

Traditional library services are provided including compilation of bibliographies, literature searches, telephone reference service, interlibrary loan, copying service, circulation of materials, reference verification, limited selective dissemination of information, acquisition of new materials and preparation of annotations of journal articles concerning subjects of general interest for inclusion in a quarterly training events calendar.

HARVARD-MIT REHABILITATION ENGINEERING CENTER
Children's Hospital Medical Center
300 Longwood Avenue
Boston, Massachusetts 02115

William Berenberg, M.D., Program Director
(617) 734-6000

Organization

The Rehabilitation Engineering Center, headquartered at Children's Hospital, is a collaborative effort by representatives of the Harvard Medical School, Children's Hospital Medical Center and the Massachusetts Institute of Technology. The Center is RSA-funded.

The Children's Hospital has developed a major area in its Bader Building as the focal point for the clinical research tasks of the REC. It also accommodates an EMG laboratory equipped for research and diagnostic studies and a gait analysis laboratory.

Major Activities

The Center's core areas are neuromuscular control using sensory feedback systems and devices for the handicapped, with results reported in the following areas: analysis and processing of myoelectric signals; evaluation of gait in children with cerebral palsy; cerebrospinal fluid dynamics; and new devices for the handicapped.

Major Services

Core staff members are actively involved in the evaluation of devices and techniques, including those developed in other Rehabilitation Engineering Centers and rehabilitation institutions as well as the results of its own efforts. Core staff members are also involved

in the rehabilitation engineering training of clinical and engineering professionals and students at the several co-operating institutions.

HUMAN RESOURCES CENTER (HRC)
RESEARCH UTILIZATION DEPARTMENT (RU)
Albertson, New York 11507

Dr. Henry Viscardi, HRC Director (516) 747-5400
Mr. David Molinaro, RU Director
Ms. Lenore Greenberg, Research Librarian

Organization

Human Resources Center is a private, non-profit organization dedicated to providing educational, vocational, social and recreational opportunities for the severely disabled. The Center's spectrum of programs encompasses job training and placement, academic and vocational education, independent living, research and information dissemination. Founded in 1952 by Dr. Henry Viscardi, Jr., HRC is composed of three coordinated units: Abilities Inc., Human Resources School, and the Research and Program Development Institute.

The Research Utilization Department assures that the products from HRC's research department are properly produced and distributed to the appropriate audiences through support staffing in graphic arts, technical writing, production and library services.

Major Activities

Among current activities at HRC-RU is Programmatic Research on Employment Preparation (PREP) for people with severe disabilities, especially in the transition from school to work of severely disabled youth. A driver education program for people with physical disabilities resulted recently in research into effective, yet feasible techniques for evaluating driving potentials of large numbers of disabled individuals. Currently, HRC is in the process of evaluating and developing guidelines to aid handicapped individuals interested in recreational boating.

Major Services

HRC-RU has access to the Lockheed and BRS computer systems, permitting access to 75 data bases which include ERIC, Exceptional Children, Dissertation Abstracts and NTIS. It maintains a library of local, state and national directories on all aspects of rehabilitation, and has a long list of center-produced monographs and publications available upon request. HRC-RU has prepared a modular placement training program in the form of 12 tape cassette and slide packages, available separately or *in toto* from the RU Director.

User Groups

The research library is available to outside requests by letter, telephone or personal visits by appointment. RU also is responsible for tours of HRC and mass dissemination of HRC products. Services are provided free of charge; some HRC materials are available at modest cost.

ICD RESEARCH UTILIZATION LABORATORY (ICD-RUL)
ICD Rehabilitation and Research Center
340 East 24th Street
New York, New York 10010

Isabel P. Robinault, Ph.D., RUL Director
Marvin Weisinger, Information Center Director
(212) 679-0100

Organization

The RUL Information Center on Program Evaluation was established in 1975 as a part of the Research Utilization Laboratory at ICD Rehabilitation and Research Center, under a grant from RSA.

Its purpose is to serve as an information resource on program evaluation providing literature searches, bibliographies and document loan service for staff with program evaluation responsibilities in state and federal VR agencies, and support facilities.

Major Activities

In view of the needs of program evaluation personnel and administrators, the Information Center collects:

-State agency plans and projects for program evaluation
-Procedures, forms and manuals used in the evaluation of projects and programs
-Literature from the disciplines of business management economics, sociology, as well as psychology, education, statistics and vocational rehabilitation
-Selected monographs and chapters of books on the topic
-Administrative and ephemeral materials of use in program evaluation procedures, projects, training and planning

This collection is highly specialized, and in depth cataloguing of all materials is done in order to achieve

a high degree of accuracy and speed in retrieval.

In addition, the RUL has published several monographs in the area of program evaluation:

Bennett, C. and Weisinger, M. *Program Evaluation: A Resource Handbook for Vocational Rehabilitation.* New York: ICD-RUL, 1974, 150 pp.

Weisinger, M., Robinault, I. and Bennett, C. (Eds.), *Program Evaluation: Selected Readings,* New York: ICD-RUL, 1975, 90 pp.

Robinault, I. and Weisinger, M. (Eds.), *Program Planning & Evaluation: Selected Topics For Vocational Rehabilitation.* New York: ICD, 1975, 114 pp.

One monograph is now in press:

Reagles, *A Handbook for Follow-up Studies in the Human Services,* New York: ICD-RUL, In press.

Major Services

The Information Center publishes the quarterly, *PE/VR Newsletter,* highlighting materials from the Center's growing collection which presently comprises in excess of 2,000 documents. Materials listed in the *Newsletter* may be borrowed from the Center for a period of 10 working days.

In response to specific questions from the field, the Information Center will conduct a search of its own collection. In addition, a computer search will be made of available data bases in the human services, psychology, sociology, economics, business and industry, and management and administration, as well as Federally generated contractor and grantee reports. The requestor will be sent a bibliography from which he may choose materials to review. The Center will provide loan copies of all those documents that are not readily available in agency or university libraries.

User Groups

Users are limited to program evaluation personnel and administrators in Federal and State VR agencies, evaluation personnel in private facilities that render services to State agencies and to University personnel who serve as program evaluation consultants or subcontractors to the public and private agencies above.

Mail requests to be placed on the *Newsletter* mailing list or requests to specific information needs may be addressed to:

ICD-RUL
340 East 24th Street
New York, NY 10010

Telephone requests:

For *Newsletter* Program Evaluation - Ms. Cary
(212) 679-0100 Ext. 298
For General Information, Center Operations & Policy
Mr. Weisinger (212) 679-0100 Ext. 288

Documents and materials are supplied on loan at no charge to the user.

INDEPENDENT LIVING RESEARCH UTILIZATION PROJECT (ILRU)
Texas Institute for Rehabilitation Research
1333 Moursund Avenue
Houston, Texas 77025

Lex Frieden, Co-Director (713) 797-1440 ext. 504
Jean Cole, Co-Director ext. 507

Organization

The goal of the Independent Living Research Utilization Project (ILRU) is to improve the spread and utilization of the results of research programs and demonstration projects in the field of independent living. ILRU was established in September 1977 by the Rehabilitation Services Administration/DHEW.

Major Activities

ILRU's continuing activities include the development of technical assistance materials and resources for independent living programs. In September 1978, ILRU sponsored a National Conference on Independent Living in Houston. During 1979, the project will be initiating and co-hosting five regional conferences on independent living. Each conference will meet for two and one-half days and are scheduled to be held in Seattle, Chicago, Dallas, Washington and Atlanta.

Major Services

The project's major services include the provision of

- technical assistance in independent living
- access to data files on independent living programs
- on-going consultation to a number of groups who are

working to develop independent living programs.

The following items have been produced by the project and are available for distribution:

- *A Directory of Independent Living Programs in the United States.*
- A 60 minute videocassette which describes model independent living programs. ($50.00)
- Bibliographies related to independent living.
- A lexicon related to independent living.

The project is in the process of producing an ILRU newsletter, and a technical assistance resource manual on independent living both of which will be available early in 1979.

User Groups

ILRU is open to the public. The staff will respond to any request on independent living, preferably by mail. The costs of the products and services--some are available free of charge--depends upon the request. A rate structure will be provided by writing to the above address.

INDIANA REHABILITATION SERVICES
RESOURCE CENTER
212 Illinois Building
17 West Market Street
Indianapolis, Indiana 46204

Elizabeth Najar, Resource Specialist (317) 633-6866

Organization and User Groups

The Resource Center was founded in 1975 to serve job-related informational needs of Indiana Rehabilitation Services personnel and to provide limited information services in the field of rehabilitation to the general public of Indiana, specially persons with handicapping conditions and those providing or preparing to provide rehabilitative services to such persons.

Major Activities

The information assembled in the center offers some 2600 monograph titles and 60 periodical titles, 25 drawers of newsletters and pamphlets, slide/tape film and videotape. Equipment available for loan includes circulating audiocassette recorders, 26mm film projectors, slide projectors, videotape cameras, monitors and recorders, as well as a microfiche reader.

Major Services

The center performs reference services, routing of incoming journals to agency personnel, and orientation of all new personnel in addition to its ongoing informational activities described above.

INNOVATIVE MATCHING OF PROBLEMS TO AVAILABLE REHABILITATION TECHNOLOGY (IMPART)
Texas Rehabilitation Commission
118 East Riverside Drive
Austin, Texas 78704

Dr. Frederick O. Bohls, Project Coordinator
(512) 447-0367

Organization

IMPART was established in 1977 by the Texas Rehabilitation Commission. The project is funded by a contract with RSA to incorporate modern technological advancements in solving rehabilitation problems which handicapped persons may encounter when entering the work field, including difficulty in reaching tools, operating machinery, handling supplies, communicating, increasing work performance.

Major Activities and Services

Upon receipt of a rehabilitation problem, the IMPART team develops individualized solutions by identifying appropriate methods, materials, procedures, and devices already developed or in development; indicating a commercial source or any established method; recommending the modification of a commercially available device or the fabrication of special apparatus; identifying appropriate resource agencies, programs, researchers, medical facilities, practitioners, and custom-manufacturer manufacturers.

Computer data bases are used to locate the latest research reports filed by the engineering centers in the technological areas of aerospace, atomic energy, aviation, defense, and rehabilitation.

Problems for which a satisfactory solution is not generated are referred to the appropriate RSA Rehabilitation

Engineering Center, NASA Technology Utilization Division, VA Prosthetics Center, or Federal Aviation Agency.

User Groups

Members of the rehabilitation community, handicapped individuals, employers, medical staff, and others who are concerned with rehabilitating handicapped people are encouraged to participate at no cost to the problem originator by submitting a problem statement to the IMPART project through the Project Coordinator at the address listed above. IMPART is a public service and is available to anyone who has a work-related rehabilitation problem.

MASSACHUSETTS REHABILITATION COMMISSION (MRC) LIBRARY
20 Providence Street
Boston, Massachusetts 02116

Elmer C. Bartels, Commissioner (617) 727-2181
June C. Holt, Librarian

Organization

The goal of the State DVR special library is to provide current awareness of rehabilitation information and literature for its staff. However, the library is open to the public.

The library was established in 1963 with a small budget from Commission funds. The library has grown, and so has its budget.

Major Activities

The library is a major resource to rehabilitation literature in the area. Users include private research organizations, local public and private agencies, university educators, students in rehabilitation programs, consumers for the handicapped, and individuals with handicapping disabilities. Activities center around answering reference questions in person, by telephone, and through correspondence. The library is engaged in collection development, providing substantive literature in the field of rehabilitation counseling and is a reference source to information on rehabilitation legislation. An acquisition list is circulated to staff every two months with an informational newsletter and tables of contents of rehabilitation journals attached. A mailing list has been established for individuals or organizations interested in receiving information on rehabilitation literature.

Major Services

A large part of the service is reference service, information retrieval, and document delivery to staff members located in area offices.. Literature searches and bibliographies are compiled also.

Special reference tools are the Research and Demonstration reports available on microfiche; a card catalog of special journal articles filed by subject; the Federal Manual, Agency Policy and Procedures, and the Counselor Resource Manual. Lists of local and national facilities, directories, films, audiotapes, bibliographies, journals, (including back issues), newsletters, and in-house research reports are available for patron use.

User Groups

State DVR Staff; community groups including students, researchers, individuals with handicaps; and persons and organizations from out of state are welcome to use the libraries resources. Contact may be made through on-site visits, telephone or mail. There is no cost for use of the library. Photocopy is free. A charge is made only for the replacement of lost books.

MATERIALS DEVELOPMENT CENTER (MDC)
STOUT VOCATIONAL REHABILITATION INSTITUTE
School of Education
University of Wisconsin - Stout
Menomonie, Wisconsin 54751

Dr. Arnold B. Sax, Director (715) 232-1164
Mr. Ronald R. Fry, Information Service Coordinator
(715) 232-1342

Organization

The Materials Development Center (MDC) is the national resource center for the collection, development, and dissemination of information and products in the areas of vocational evaluation and work adjustment. Recently MDC has expanded its mission to include the area of rehabilitation facility management. The objective of the MDC is to provide practical assistance to practitioners in the fields of vocational evaluation, work adjustment, and facility management. The goal is to upgrade professional competencies, thereby, improving client services.

The MDC was originally funded in 1969 and is supported in part by a grant (12-P-55307) from the Rehabilitation Services Administration/DHEW. In recent years MDC has received supplementary grants to make materials available to international users.

Major Activities

The MDC staff remains alert to needs in the areas of evaluation and adjustment. Several means are employed in determining which needs are the most immediate. First, an analysis of requests for information received by the MDC is made. Secondly, "consumers" or users in the field evaluate MDC products and supply information indicating what additional areas "how-to-do-it" materials would be helpful to them. Thirdly, personal contact

with those currently working in the evaluation/adjustment area is maintained. Finally, the MDC responds to current happenings in the field such as recent legislation, new professional standards, or new principles or materials affecting a broad part of the field.

Once an area has been determined as having a legitimate unmet need, a search is made of currently available materials in that area. If a quality publication, slide/tape series, film or videotape exists that meets the need of the rehabilitation professional, the MDC will inform potential users where the material can be obtained. In some cases the MDC will reproduce the product and make it available to the field. If there is nothing suitable, the MDC will develop one.

Major Services

The MDC Information Retrieval System contains a comprehensive collection of material (journal articles, speeches, research reports, facility publications, etc.) relating to the areas of evaluation and adjustment. An eligible facility (see below) can use this system by: (a) submitting topical type information requests, or (b) requesting documents by the accession number or titles which appears in the annually published MDC evaluation and adjustment bibliographies. The information found to be available is then loaned to the eligible facility.

The following types of products are available:

The MDC Information Newsletter is distributed bimonthly. It describes MDC materials and services, as well as materials on evaluation and adjustment available from other sources. Anyone, regardless of eligibility status, may have his name entered on the mailing list to receive the newsletter.

MDC Publications include a number of documents on evaluation and adjustment. Some of these are authored by the MDC staff and others are reprints of valuable but out-of-print materials. A booklet entitled *Suggested Publications for Developing an Agency Library on Work Evalua-*

tion and Work Adjustment (free on request from the MDC) lists these as well as documents available from other sources.

Audiovisual Materials. Brochures (free on request) describe a variety of slide/tape, filmstrip, and cassette materials available from the MDC. These materials are designed to be used as information and in-service training for professional staff or for direct use with clients. This material may be loaned to or purchased by eligible facilities or may be rented or purchased by non-eligible facilities.

Motion Picture Film Rental. A film rental brochure (free on request) describes 16mm films on evaluation and adjustment which are available from MDC on a rental or purchase basis (no free loan on 16mm films).

The Work Sample Manual Clearinghouse contains manuals that explain the development of various work samples that have been used effectively in the field. These manuals have been collected by the MDC and are available on loan to eligible facilities and on a rental basis to other facilities. A free catalogue is available on request.

User Group

In accordance with the MDC grant provision, the following persons and facilities are declared eligible for all MDC services: (a) state agency vocational rehabilitation facility specialists, and (b) facilities approved by the state VR agency to deliver evaluation and/or adjustment services to state agency sponsored clients.

MINNESOTA MEDICAL REHABILITATION AND RESEARCH AND TRAINING CENTER NO. 2 (RT-2)
Department of Physical Medicine and Rehabilitation
University of Minnesota Hospitals and Sister Kenny Institute, Abbott-Northwestern Hospitals
Box 297, Mayo
University of Minnesota Hospitals
Minneapolis, Minnesota 55455

Frederic J. Kottke, M.D., Ph.D. (612) 373-8990
Professor and Head

Organization

The Rehabilitation Research and Training Center at the University of Minnesota Medical School is presently completing its seventeenth year as a senior center. The initial grant for the establishment of this center was awarded on November 1, 1961. This center established a comprehensive rehabilitation program integrated with the medical services of the University Hospitals in collaboration with the Sister Kenny Institute, which is the rehabilitation facility of the American Rehabilitation Foundation.

Major Activities

Through the cooperative efforts of these institutions, patient services are provided to a wide variety of patients of all ages with physical disabilities and psychiatric problems. The heavy patient load guarantees that subjects needed for research projects will be available. The influence of the Rehabilitation Research and Training Center, the University of Minnesota Hospitals, and the Sister Kenny Institute has extended throughout the upper midwest region as an outstanding center for research on physical and psychological disabilities.

The mission of RT-2 is three-fold: education of the trained professionals required to fulfill health care

needs; research to advance the health sciences related to rehabilitation; and provision of health care and health services to the people of the region.

Major categories of research interest include bionomic adaptations; cardiac rehabilitation; ergonomics; neuromuscular; psychosocial-vocational; spinal cord injury; health care delivery; and education in rehabilitation.

Major Services

For all patients admitted to the Rehabilitation Center of the University of Minnesota Hospitals, data is collected and stored in a computer for retrieval and comparison.

A recently developed special reference tool is the Functional Assessment Inventory (FAI), developed through Project R-67, "A Functional Assessment Inventory for Rehabilitation Evaluation". FAI provides effective measures of functional capacity, methods of quantifying disabilities, and sequential assessment of functional capacity as indicators or predictors of rehabilitation outcomes.

RT-2 conducts some 30 training projects for graduate and undergraduate students, offering university curriculum, continuing education and inservice credits. In addition, the facilities of the Department of Physical Medicine and Rehabilitation are used by the professional staff for research on rehabilitation. A complete description of the 17 continuing research projects now being conducted is available in the annual RT-2 progress report.

The Center also offers a number of publications, audiovisual rentals or loans, and films. Catalogs are available upon request. Some representative publications are:

Olson, M.: *A Composite Bibliography of Publications From Research and Training Centers.* Department of Physical Medicine and Rehabilitation, University of Minnesota Medical School, Minneapolis, Minnesota, 1973.

Athelstan, G. T., et al.: *Psychological Sexual, Social and Vocational Aspects of Spinal Cord Injury: A Selected Bibliography with 1977 Supplement.* Department of Physical Medicine and Rehabilitation, University of Minnesota, Minneapolis, 1976.

Newman, Ellen (with M. Price): *Urinary Tract Care (A Manual).* Department of Physical Medicine and Rehabilitation, University of Minnesota Medical School, Minneapolis, Minnesota, 1976.

Newman, E. and M. Price: *Double Lumen Catheterization of the Ileal Conduit.* Department of Physical Medicine and Rehabilitation, University of Minnesota, 1974.

User Groups

Physical medicine and rehabilitation services are provided for both inpatients and outpatients. These services are comprehensive and are coordinated under medical direction to assist each patient to achieve maximum self-sufficiency and to participate again in the affairs of his home and community.

There is a 20-bed station for adult inpatients and a 20 bed station for the special rehabilitation problems of children. Less severely involved patients are treated as outpatients.

The services available from the Rehabilitation Center include the following: medical, physical therapy, occupational therapy, speech therapy, vocational services, work evaluation and special services.

Outpatient appointments can be made by calling or by writing the Department of Physical Medicine and Rehabilitation at the above-stated phone and address.

NATIONAL CLEARING HOUSE OF REHABILITATION TRAINING MATERIALS (NCHRTM)
Oklahoma State University
115 Old USDA Building
Stillwater, Oklahoma 74074

Paul Gaines, Director
Patsy Stafford, Information Specialist (405) 624-7684

Organization

NCHRTM is a non-profit service which maintains materials in the broad area of rehabilitation. It has as its mission the gathering and dissemination of materials to supervisors and training personnel in state vocational rehabilitation agencies and to counselor educators.

Major Activities and Services

The Clearing House serves as an information resource for rehabilitation educators, state agency personnel and other professional workers in rehabilitation by providing access to reports, journals, books, films, tapes, and other training aids. The information collected from various sources is publicized in bibliographical form through the *Clearing House Memorandum* which is sent out quarterly to approximately 1,600 persons and agencies in the field of rehabilitation.

The Clearing House accepts materials to be distributed to requesting organizations on several bases; specifics on procedures are available from the Clearing House office. Notes and want ads are printed in the *Clearing House Memorandum* as space permits.

NATIONAL REHABILITATION INFORMATION CENTER (NARIC)
The Catholic University of America
308 Mullen Library
Washington, D.C. 20064

Judith J. Senkevitch, Director (202) 635-5826
Sharon D. McFarland, Information Specialist

Organization

The National Rehabilitation Information Center (NARIC) was established in October 1977 to collect, organize and make available a comprehensive collection of documents and audiovisual materials prepared under grants and contracts funded by RSA. The mission of the Center is to improve information delivery to the rehabilitation community in order to increase the effectiveness of rehabilitation programs. NARIC is funded by the Rehabilitation Services Administration/DHEW (Grant No. 22-P-59137).

Major Activities

NARIC's collection covers all aspects of the rehabilitation of physically and/or mentally disabled individuals and includes materials relevant to the rehabilitation of all disability groups, as well as documents relevant to professional and administrative practices and concerns in the rehabilitation field. At present the collection consists of approximately 4,000 RSA research reports, monographs and audiovisual materials; 1,000 reference books relevant to rehabilitation; and 150 periodical subscriptions (journals and newsletters). This collection is expected to double in size by 1980, and to increase at an annual rate of approximately 15% thereafter.

Since the Center's catalogue containing bibliographic citations of its collection is maintained in an *on-line* computerized storage and retrieval system, the NARIC staff can search the computerized file of bibliographic

citations to retrieve references on a particular subject. The computerized catalogue (data base) is updated at regular intervals and *printed out* into 8 1/2 x 11 inch book catalogues, listed alphabetically by author or title, or numerically by grant/contract number. A printed subject catalogue is being prepared for publication in mid-1979, and will be disseminated to other organizations concerned with providing information on rehabilitation services for disabled individuals. Beginning in mid-1979 brief abstracts of the materials in the collection will be available in the computerized system along with the bibliographic records.

By Fall 1979 it is anticipated that the entire NARIC computerized rehabilitation data base of bibliographic citations with abstracts can be accessed directly via computer terminal anywhere in the United States. Outside access to the data base will be available to a limited number of organizations beginning in March 1979.

Major Services

NARIC provides on request:

- *Bibliographies* on topics relevant to rehabilitation. The Center staff will search NARIC's computerized rehabilitation data base for entries on a particular topic, and will also search other related databases such as ERIC (Educational Resources Information Center, NTIS (National Technical Information Service), and MEDLARS.

- *Copies* of reports and other materials from NARIC's RSA collection.

- *Answers* to reference questions--when the information is available in published form. NARIC's staff will also help users locate other appropriate information resources for their particular questions.

The Center also makes available at no charge selective lists of special resources, such as a list of audiovisual directories relevant to rehabilitation and a list of NARIC's rehabilitation periodical holdings.

User Groups

Any disabled individual; rehabilitation practitioner, administrator, researcher or other professional; and any concerned citizen may use NARIC's resources by

- a personal visit to the Center's reading room or
- calling or writing NARIC's *Information Specialist.*

The only cost to any user is for:

Photoduplication: 10¢ per page for 1 to 20 pages; over 20 pages, 5¢ per page.

Duplication of AV Materials (audiotape cassettes, etc.): Actual cost of duplication.

Customized Literature Searches of Computerized Databases:

- NARIC File: No charge

- Other outside databases (such as EDUCATIONAL RESOURCES INFORMATION CENTER, NATIONAL TECHNICAL INFORMATION SERVICES, PSYCHOLOGICAL ABSTRACTS, etc.): Actual cost of computer time and print-out will be billed (average cost is $15.00).

OHIO REHABILITATION SERVICES COMMISSION LIBRARY
4656 Heaton Road
Columbus, Ohio 43229

Mae Ramey, Librarian (614) 466-5904

Organization

The RSC Library was originally established approximately six years ago under a Federal Grant in conjunction with Staff Development.

Major Activities and Services

The library has assembled books, pamphlets and articles in the field of rehabilitation for use by field personnel in all phases of client rehabilitation. Films include such topics as public relations, office management and personnel management.

User Groups

Over the past several years the Center has expanded its services to individuals, private industry, and handicapped persons, assisting when needed information is not available through local library sources.

PACIFIC REGIONAL CONTINUING EDUCATION PROGRAM (PRCEP)
University of Hawaii, College of Education
Educational Psychology Counseling and Guidance
1776 University Avenue, WA2-125
Honolulu, Hawaii 96822

Dr. D. J. Dellario, Director
Ms. Peggy Murphy-Hazzard, Ed. Spec. II (808) 948-7105

Organization

The PRCEP project was established to organize and maintain a systematic and integrated sequence of continuing education training that will address basic rehabilitation skills and knowledge, significant issues, RSA priorities and to coordinate with other training entities in the Pacific Basin. PRCEP was founded in 1975, and is funded primarily by an RSA grant and partially by the Hawaii Division of Vocational Rehabilitation.

Major Activities

PRCEP's thrust is aimed at training vocational rehabilitation counselors in the Pacific Basin Region. The ongoing activities include maintaining the Rehabilitation Learning and Research Center (RLRC), providing systematic and integrated training programs, and providing the state division of vocational rehabilitation division with a supply of programs, trainers and materials. A quarterly newsletter and training programs to be integrated with the state vocational rehabilitation division's inservice training are presently in proposal stages.

Major Services

PRCEP does not use a data base service for information retrieval at present. However, special reference tools include the RLRC as well as audiovisual equipment, directories, journals, bibliographies and lists of facilities.

User Groups

PRCEP materials may be used by vocational rehabilitation counselors, students, staff, PRCEP and facility training coordinators. There is no charge for use of resources. Requests for specific information should be addressed to the education specialist listed above.

PARTNERS REHABILITATION EDUCATION PROGRAM (PREP)
Partners of the Americas
2001 S Street, N.W.
Washington, D. C. 20009

Gregory L. Dixon, Director (202) 332-7332

Organization

Partners of the Americas is a voluntary people-to-people organization linking 44 U.S. states with state areas or countries in 20 Latin American or Caribbean nations. Since 1964, Partners has promoted mutual understanding and development through international exchanges in the areas of sports, culture, agriculture, rural development, community education, and rehabilitation. Partners of the Americas, a private organization, receives funding from a variety of government, foundation, and corporate sources.

The Partners Rehabilitation Education Program (PREP) encompasses a wide variety of activities to aid handicapped persons in the areas of special education, mental retardation, rehabilitation, and drug abuse, to mention a few. It has received some RSA support for the past two years.

Major Activities

The PREP program operates through short-term exchanges which typically provide new training for people in the fields of special education, rehabilitation and mental health. Professionals from Latin America and the U.S. exchange information, ideas and techniques toward improving the quality of life of disabled persons. Participants serve as volunteers, and lengths of stay seldom exceed one month.

Major Services

Partners of the Americas recognizes the shortage of information relating to handicapping conditions, treatment, and rehabilitation in Latin America and that a sharing of the knowledge being gained through PREP exchanges would benefit both Latin American and American professionals. Therefore, approximately 150 trip reports and abstracts of those reports which have been prepared by the participants since 1977 have been placed in the National Rehabilitation Information Center (NARIC). A descriptor catalog is now being developed and will soon be ready for distribution.

User Groups

Additional copies of the reports and general information about PREP and other Partner programs is available through the Partners of the Americas national office (see above) to all persons interested in international rehabilitation.

THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED (PCEH)
Room 614, Vanguard Building
1111 - 20th Street N.W.
Washington, D.C. 20036

Larry K. Volin, Deputy Director, State Relations
(202) 653-5153

Organization

Established by Presidential Executive Order in 1947, PCEH is charged to maintain in this country an attitude of acceptance for handicapped persons in the work force; to identify and take steps to eliminate roadblocks in the way of vocational opportunities of people with handicaps.

Funding is by annual congressional appropriation.

Major Activities

To achieve its objective, PCEH works with and through a wide range of national organizations, employers, labor groups and individuals who are opinion molders, utilizing them through standing committees to provide technical assistance in the areas of their special capabilities. Many of the Committee's 600 members serve to encourage the employments of handicapped individuals through personal appearances as panelists at conferences and seminars, as well as on radio and television programs. One of the Committee's primary functions is to disseminate and explain Section 503 and 504 of the 1973 Rehabilitation Act. PCEH also prepares advertising and articles for national and trade magazines, and produces and distributes films and videotapes.

Major Services

The President's Committee also works with and through the

governors' committees on Employment of the Handicapped with technical assistance in forming local committees and campaigns.

User Groups

Publications and other materials produced by PCEH are available to the public without charge. Inquiries should be addressed to the national office listed above.

REGION VI REHABILITATION CONTINUING EDUCATION PROGRAM
(RCEP)
Department of Rehabilitation Science
University of Texas Health Science Center
5323 Harry Hines Blvd.
Dallas, Texas 75235

Sean G. Connolly, Ph.D., C.R.C., Director
(214) 688-2880

Organization

Established in 1974 as a resource for post-employment training of rehabilitation personnel in public and private agencies and programs, RRCEP complements the concerns of the other two RRCEPs in Region VI at Hot Springs, Arkansas (rehabilitation of the severely disabled) and at Norman, Oklahoma (training for the management of rehabilitation agencies and facilities).

Major Activities and Services

As a training and education center, RRCEP concentrates on short-term courses ranging in duration from one day to a week. The majority of these are conducted by RRCEP staff who travel to field locations throughout the region, which encompasses Arkansas, Louisiana, New Mexico, Oklahoma and Texas. Some recent workshop topics have covered interviewing skills, psychological aspects of disability and testing in vocational rehabilitation, counseling and crisis management.

In addition, the Center staff works closely with the undergraduate and graduate programs at the University of Texas Health Science Center where the RRCEP is headquartered. The curricula lead to a Bachelor of Science in rehabilitation science and a Master of Science in rehabilitation counseling.

REGIONAL REHABILITATION CONTINUING EDUCATION PROGRAM
FOR MANAGEMENT AND ADMINISTRATION
Institute of Governmental Administration
Georgia State University
Room 313, 10 Pryor Street
Atlanta, Georgia 30303

James E. Stephens, Director (404) 658-3353

Organization

The Rehabilitation Continuing Education Program was established specifically to provide training and continuing education for administrators, managers, and supervisors in State vocational rehabilitation agencies in DHEW Region IV. The program began operation in September 1978, and is funded through a grant from DHEW, Office of Rehabilitation Services, Region IV. At the present time, the program is the only RRCEP devoted exclusively to rehabilitation administrative, management, and supervisory continuing education.

Major Activities

For the first 18-24 months, the ongoing activities of the RRCEP will consist of training needs assessment of agency management and the development and delivery of on-site management and supervisory training programs for State Rehabilitation Agencies in DHEW Region IV.

Major Services

Since this RRCEP is in its developmental stages, major services will be initially restricted to the routine sharing of information and programs with other RRCEPs and rehabilitation training programs nationally.

User Groups

Utilization of resources is limited to State vocational rehabilitation agencies in DHEW Region IV.

REGIONAL REHABILITATION CONTINUING EDUCATION PROGRAM
OF VIRGINIA COMMONWEALTH UNIVERSITY (RRCEP/VCU)
Department of Rehabilitation Counseling
School of Community Services
Virginia Commonwealth University
P. O. Box 499, Woodrow Wilson Rehabilitation Center
Fishersville, Virginia 22939

Dr. Richard S. Luck, Director (703) 886-6263
Mrs. Jean S. Martin, Librarian

Organization

The program was established as the Regional Counselor Training Program in 1966. As RRCEP, the program now offers training to the personnel of state and private rehabilitation agencies of HEW Region III in the following content areas:

- Post-induction for rehabilitation counselors and related personnel
- Rehabilitation field work practicum
- Techniques and methodologies in rehabilitation supervision
- Advanced counseling skills
- Knowledge utilization in rehabilitation
- Program planning
- Rehabilitation facilities training

RRCEP/VCU if funded in part by the Rehabilitation Services Administration, ORS, Region III.

RRCEP?VCU is housed in the Mary E. Switzer Clinical & Professional Services Building of Woodrow Wilson Rehabilitation Center which is accessible to people with

disabilities, and only commercial establishments which are accessible to disabled people are utilized by the program as training sites.

Major Activities

The Regional Rehabilitation Continuing Education Program of the Virginia Department of Rehabilitative Services is housed in the same building which enables the two RRCEPs of Region III to share meeting and classroom space, equipment, and library facilities. The physical proximity of the two programs also facilitates cooperative planning and activity in meeting the continuing education needs of rehabilitation personnel in Region III. The two RRCEPs have a joint RRCEP Advisory Council.

Major Services

The RRCEP/VCU Library has access to the University Library's information retrieval systems and participates in the Virginia state college and university interlibrary loan system. The library subscribes to an extensive listing of rehabilitation and related periodicals for use of rehabilitation personnel who visit the library. A soft-bound library and over 4,000 books are housed in this library and are available to rehabilitation personnel throughout Region III by mail.

RRCEP/VCU contributes to two publications of RRCEP/DRS. They are the Region III Master Calendar for Training in Rehabilitation and the quarterly newsletter "Awareness". These RRCEP/DRS publications are of great value in informing the rehabilitation practioners of Region III of the training and library offerings of RRCEP/VCU.

User Groups

The library's services and resources are available to state and private rehabilitation agency personnel within HEW Region III on a no-cost basis.

REGIONAL REHABILITATION CONTINUING EDUCATION PROGRAM/
VIRGINIA DEPARTMENT OF REHABILITATIVE SERVICES
(RRCEP/DRS)
P. O. Box 367
Woodrow Wilson Rehabilitation Center
Fishersville, Virginia 22939

Gerald K. Wells, Ph.D., Director (703) 885-7281
Blake S. Clark, Ph.D., Information Contact Ext. 343

Organization

RRCEP-DRS was established in 1974 by a special RSA grant to: (1) provide continuing education services of an orientation, skills development, and new ventures nature to all staff employed in state rehabilitation agencies, (2) to coordinate agency in-service programs throughout the region in order to eliminate gaps in training, duplication of effort, and to develop a greater quality of training through coordinated and combined agency efforts, and (3) to assist state VR agencies in planning, analyzing, and evaluating the content, instruction, and effectiveness of their training programs in order to improve the overall quality of staff development services to the rehabilitation practitioner.

Major Activities

RRCEP-DRS has been heavily involved in presenting three basic skills training programs. *Counseling Skills* and *Effective Caseload Management* are designed as 3-day workshops for rehabilitation counselors and supervisors. *VR Orientation from a Secretarial Perspective* is a one-day program to help clerical workers gain a greater sense of appreciation and professionalism in their work.

In addition to these three on-going core areas, RRCEP-DRS also presents an annual Region-wide Conference on Deafness and a Region-wide Training and Development

Conference for training personnel. It is planning to develop the capacity to present a placement program for practitioners and specialists.

Support activities include training needs assessment surveys, publication of a quarterly newsletter, an annual master calendar of training events, and periodic "training notes" for educational staff.

A major research and planning effort has been the development of a model Manpower Development and Training Plan for use in state agencies to better organize and coordinate their use of manpower and staff development functions.

Major Services

RRCEP-DRS has ready access to the Regional Rehabilitation Library located at Woodrow Wilson Rehabilitation Center and staffed by Virginia Commonwealth University. RRCEP-DRS does not operate a specific data retrieval system, but will assist field staff to gather information which might be available in the areas of (1) training, (2) organizational development, (3) management principles and (4) rehabilitation counseling.

RRCEP-DRS publishes a quarterly newsletter "Awareness" which notes new library acquisitions and region-wide training events.

User Groups

RRCEP-DRS is particularly available to state VR agency training personnel. It is also accessible to VR field staff, but usually through their respective staff development office. RRCEP-DRS also presents specialized workshops and training functions to certain rehabilitation associations, rehabilitation centers, and other government agencies which work with the handicapped.

Contact should be made directly with RRCEP-DRS. Costs involved will vary with the request.

REGIONAL REHABILITATION RESEARCH AND TRAINING CENTER
Emory University School of Medicine
Center for Rehabilitation Medicine
1441 Clifton Road, N.E.
Atlanta, Georgia 30322

Carmella Connella, Ph.D., Acting Director
and Director of Research (404) 329-5580

Organization

The overall objective of Emory University Research and Training Center (RT-6) is to develop and implement applied research and training directed toward advancing the methods of evaluation, treatment and prediction of treatment outcomes for rehabilitation patients/clients with neuromuscular skeletal impairments.

Major Activities

The present core research aims toward determining the efficacy of therapeutic modalities, physical and electronic, as tools for evaluation and restoration of function. The specific modality under consideration at present is Biofeedback.

Major Services

An assortment of training materials include videotapes and audiotapes have been developed by the Center, as well as a series of conferences and courses designed for physicians, rehabilitation personnel and others working with the disabled, which have drawn over 2,700 participants in recent years.

REGIONAL REHABILITATION RESEARCH INSTITUTE (RRRI)
Industrial Social Welfare Center
Columbia University School of Social Work
622 West 113 Street
New York, New York 10025

Dr. Sheila H. Akabas, Director (212) 280-5173

Organization

The focus of interest is on the role of unions and management in job opportunities for the disabled, with four priority goals:

- To test and evaluate a preventive rehabilitation service delivery model.
- To increase the understanding of the conditions under which the private sector participates in the rehabilitation process.
- To improve the collaborative ties between labor and management, and community rehabilitation facilities, in order to increase both the resources devoted to rehabilitation and the employment options facing the disabled.
- To provide technical assistance in relation to this core area to federal, state and local rehabilitation agencies and facilities.

Established in 1975, the institute is funded by the Rehabilitation Services Administration.

(RRRI is a project of the Industrial Social Welfare Center which also has a major five-year project: "Training to Link World of Work to Mental Health Care" that is funded by the National Institute of Mental Health. The Center also provides technical assistance to labor unions and employers in organizing and monitoring rehabilitation and social service programs for workers.)

Major Activities

The study of disability claimants of a union's health and security plan has been an effort to define the problems of workers who claim short-term disability and determine factors that lead to long-term disability or dropping out of the work force. It has designed and tested a preventive rehabilitation intervention service delivery model aimed at reducing these problems.

The Affirmative Action Consortium is a group of projects funded by RSA and coordinated by the RRRI that are attempting to develop and test role models in affirmative action for the disabled for a labor union, a municipal government, an employer association, a private rehabilitation facility and a state vocational rehabilitation agency. The RRRI coordinates the development and testing, particularly data collection and dissemination of the models and their elements, and is responsible for developing the interface components for an overall model for state vocational rehabilitation agencies.

A study of job hunt behavior of the disabled involved interviewing over 100 severely disabled job seekers from the New York City area to learn how their searches were conducted, the barriers they faced and the factors that seemed to be most related to a successful outcome. Policy implication of findings are now being developed.

The RRRI, in its role as a technical assistance resource, provides training for rehabilitation professionals. This year, the Institute is developing a Region II short-term training program on Rehabilitation of the Mentally Ill for rehabilitation counselors and educators. The conference will be held on March 28-30 in New Paltz, NY.

During the previous funding year, the RRRI developed and conducted two other regional short-term training conferences: the first, a Title V Conference was open to representatives of RSA grantee institutions in the region and focused on the impact of affirmative action/ nondiscrimination for the disabled on rehabilitation

and higher education. The second dealt with the rehabilitation problems of the industrially impaired and the gaps between rehabilitation and other institutional arrangements that constitute barriers to the rehabilitation of workers who become disabled.

The Institute is completing a five-year cycle as the RRRI for Regions I and II. The significance of prevention, the value of early intervention in job maintenance of the newly disabled has been confirmed. The fruitfulness of the core area of the "Roles of Management and Trade Unions in Job Opportunities for the Disabled" has been demonstrated and the need for further exploration of issues raised during the past five years is apparent. The RRRI is proposing a systematic investigation of the complex of world of work systems and their interactions as they relate to rehabilitation needs of disabled workers and the formerly employed.

In addition, the RRRI and the Affirmative Action consortium will be searching for sites to try out the models developed by the projects. Organizational roles, many of which will have been developed in different sites, will be tried out as an integrated model in single settings. Strategies for forging strong linkages among affected organizations (city government, labor unions, employer associations, private and state rehabilitation agencies) will be developed and tested.

Major Services

The Industrial Social Welfare Center publishes a newsletter to inform interested parties about the activities of the RRRI and to provide information and issues on topics of concern to those who are involved or interested in industrial social work.

The Industrial Social Welfare Center also has published a series of program briefs, or mini-directories for social workers in a variety of subject areas vital to industrial social work roles. Briefs have appeared on the following topic areas:

- Public Assistance Programs
- Comprehensive Directories
- Garnishment Facts
- Self-Help Groups
- Rehabilitation Services

Several bibliographies also are available from the Industrial Social Welfare Center, including:

- Annotated Bibliography of Management Programs Employing the Handicapped
- Bibliography of Readings Relevant to Occupational Social Service Programs
- Literature Review on Job Hunt of the Disabled
- Annotated Bibliography on Affirmative Action for the Disabled
- Recommended Films and Publications for Training Programs

Annual reports of the activities of the RRRI and the NIMH supported program, "Training to Link the World of Work to Mental Health Care" also are available form the Center, as well as reprints of publications concerned with rehabilitation and/or the training programs.

User Groups

Resources of the RRRI are open to professionals in the field and other interested persons, and can be obtained by writing to the director at the above address. A complete list of more than 20 publications is available upon request.

REGIONAL REHABILITATION RESEARCH INSTITUTE ON
ATTITUDINAL, LEGAL, AND LEISURE BARRIERS (RRRI-ALLB)
George Washington University
1828 L Street, N.W. - Suite 704
Washington, D.C. 20036

Jeffrey Strully, Director (202) 676-6377
Debra Cornelius, Coordinator (202) 676-6842

Organization

The focus of the Regional Rehabilitation Research Institute on Attitudinal, Legal, and Leisure Barriers (RRRI-ALLB) is to assess attitudinal barriers facing disabled individuals, to develop and implement strategies to reduce or eliminate attitudinal barriers, and to provide technical assistance in this area.

The project's staff is committed to the concept of consumer involvement in planning and policy-making within the vocational rehabilitation system and works closely with consumer organizations in developing materials.

RRRI-ALLB was established in 1975 by the Rehabilitation Services Administration/DHEW.

Major Activities

RRRI-ALLB's major research activity has required consumer involvement in an extensive needs assessment program. The result of that research was the development of a five booklet *Barrier Awareness Series* on attitudes towards disability. The booklets are aimed at rehabilitation professionals and the general public. Packets, which will include annotated bibliographies, on attitudes towards disability are currently being prepared for use by legal professionals and by rehabilitation counselors in training.

The Institute currently circulates a bi-monthly informational newsletter, *RE-SEARCH;* provides technical assistance on matters related to attitudes; and disseminates relevant publications. (See listing below.)

The projects proposed activities include a study of rehabilitation counselor's attitudes towards the disabled; development of training components on attitudes and disability; and technical assistance on sexuality and disability.

The following is a list of publications which are currently available:

Barrier Awareness Series

A series of booklets dealing with attitudes toward disability. Can be used independently or as a set. Each booklet focuses on a different set of attitudinal barriers. Written for the general public. Single copy of each booklet is free; 2-10 copies @ 25¢; 11 or more copies @ 15¢.

The Invisible Battle: Attitudes & Disability (General attitudes of the nondisabled towards disabled)

Beyond the Sound Barrier (Attitudes toward people with hearing-impairment and deafness)

Free Wheeling (Attitudes towards people who use wheelchairs)

Counterpoint (Attitudes of disabled people towards nondisabled people)

Dignity (Attitude towards the mentally retarded)

Annotated Bibliographies

Panieczko, S. *Attitudes & Disability: A Selected Annotated Bibliography 1975-1977.* 83 pages. $2.50.

Panieczko, S., Cornelius, D. & Frank, W. *Sex & Disability: A Selected Annotated Bibliography 1975-1977.* 22 pages. $1.25.

Guides

Mistler, S. *Guidelines for Implementation of Section 504 for Colleges & Universities.* 14 pages. Single copy free. 2-10 copies @ $1.00, 11 or more copies @ 75¢.

Hermann, A. & Walker, C. *Handbook of Employment Rights of the Handicapped: Sections 503 and 504 of the Rehabilitation Act of 1973.* (Written for the layperson) 87 pages + glossary. $3.00.

Major Services and User Groups

The Institutes resources are available to any individual. On-site visitors may use extensive files on both *Attitudes and Disability* and *Sexuality and Disability.* Copies of the file material may be made for a photoduplicating fee. Single copies of or a subscription to *RE:SEARCH,* RRRI-ALLB's free newsletter, can be obtained upon request. Bibliographies on related topics can be provided.

REHABILITATION ADMINISTRATION AND MANAGEMENT PROGRAMS (RAMP)
University of Oklahoma
1700 Asp Avenue, Building 158
Norman, Oklahoma 73037

L. H. Autry, Director (405) 325-4913

Organization

The program was established in 1965 in response to an expressed need for a national development and training resource for those working managers responsible for the administration of the state/federal vocational rehabilitation programs. The purpose of the program is to improve agency operational effectiveness through improved management.

One of the major objectives has always been to provide an opportunity for working rehabilitation supervisors, administrators and managers (who are usually trained in another profession) to acquire training in management. Since there was no specific body of knowledge in rehabilitation administration another major objective has been the development of management knowledge applicable to rehabilitation.

The program was funded in 1965 through a national rehabilitation training grant. Over the years the program has expanded and continued to be funded through national and regional RSA grants. Some activities are also conducted through contracts or on a fee for service with agencies and other University-based training programs.

With a continuing education approach, RAMP is in touch with current management principles and practices as well as rehabilitation agency operations. The full-time staff and adjunct consultant/faculty have the capability to provide a wide range of organization and management development.

Major Activities

Since this program concentrates primarily on the administration and management of the State/Federal Rehabilitation Agency, material from a wide variety of sources is continually being evaluated for its application in the rehabilitation environment. The development of management material to support training development and consultation activities is an ongoing activity of the program. Continuing contact with the agencies is also maintained in order to identify current and future management issues that need to be addressed.

Opportunity for training and development of individual rehabilitation administrators and managers is available through this program. This ranges from basic supervisory and management principles and practice to the changing concepts of public administration and management needed by top and upper middle managers of rehabilitation agencies. Six courses designed in a 4½ day continuing education format are conducted at the University of Oklahoma Center for Continuing Education. Specialized courses to meet the needs of a particular group of agency managers are conducted in the field.

Consultation, and technical assistance is available for a particular agency or a group of administrators and managers who need to focus on a specific administration or management issue. This can focus on technical issues such as systems and structure, or organizational development and capacity building.

The increased complexity of rehabilitation agencies as well as the changing external environment requires that administrators and managers continually assess both their own organization and the environment. RAMP will continue to search for approaches to improve the planning, organizing and managing of rehabilitation agencies for improved effectiveness.

Major Services

The major services of RAMP are: development, training,

and consultation in the administration and management of rehabilitation agencies.

A national directory of state rehabilitation agency staff development is maintained.

User Groups

Grant activities nationally focus on the state/federal rehabilitation agencies.

In Region VI (Dallas) the Regional Rehabilitation Continuing Education Program (RCEP) in management is conducted by RAMP.

Some management, development, training and consultation is available to other rehabilitation research and/or training centers, public and private organizations with contracts which focus on the state/federal rehabilitation program and public or private organizations closely related to the state agencies.

The extent of the activities depends on availability of staff and consultants. Cost is based on activity.

RAMP has received a grant award for a rehabilitation short-term training project of national scope "Forward Planning in Vocational Rehabilitation-Performance Projection and Goal Setting".

REHABILITATION ENGINEERING CENTER
Moss Rehabilitation Hospital - Temple University/
Drexel University
12th Street and Tabor Road
Philadelphia, Pennsylvania 19141

A. Bennett Wilson, Jr., Director (215) 329-9580

Organization

The Rehabilitation Engineering Center (REC) is one of a number of such centers throughout the country supported by the Rehabilitation Engineering Services to develop devices and techniques to improve the quality of life of the physically handicapped through a total approach to rehabilitation, combining medicine, engineering, and related science.

This REC was formally established in 1972. The primary source of support is RSA, but work is also supported by the Veterans Administration, National Institutes of Health, and other government and private institutions.

Major Activities

The main effort for research and development is devoted to solution of the mobility problems of persons with musculoskeletal deficiencies.

The work is divided into four parts: Research and Development; evaluation of the results of R and D; demonstrations of rehabilitation engineering clinical services; and education including dissemination of information.

Major Services

REC has no formal program for information retrieval, but does respond to some 200 requests per year for information concerning locomotion.

The following publications are available from REC at the above address. Checks should be made payable to Moss Rehabilitation Hospital. There is a discount of 10% for two to ten copies, 20% for 11 to 49 copies; 30% for 50 to 99 copies, and 40% for 100 or more.

Devices and Systems for the Disabled. Paper from a conference held April 1975. Edited by Eugene Kwatny and Ronnie Zuckerman, Publ. 1976, 207 pp, $12.00.

Personal Licensed Vehicles for the Disabled. Report of a workshop held June 14-17, 1976. Publ. 1977, 191 pp, $5.00.

Locomotion and the Clinical Analysis of Gait. Report of a workshop held Dec. 6-8, 1976. Publ. 1977, 165 pp, $3.00.

Manual for an Ultralight Below-Knee Prosthesis. A. Bennett Wilson, Jr., Charles Pritham, Melvin Stills, 1977, 51 pp, $3.00.

Lower-Limb Orthotics: A Manual. A Bennett Wilson, Jr., David Condie, Charles Pritham, Melvin Stills, 1978, 124 pp, $10.00.

Evaluation of the Limb Load Monitor. Gunilla Wannstedt, Rebecca Craik, 1978, 75 pp, $3.00.

Pattern-Recognition Arm Prosthesis: An Historical Perspective. Roy Wirta, Donald Taylor, F. Ray Finley, 1978, $3.00.

Limb Prosthetics for Vocational Rehabilitation Workers. A.Bennett Wilson, Jr., Michael Boblitz, A. Roger Meece, 1978, $4.00.

Workshop on Wheelchairs - 1977. Report on a workshop held Dec. 6-9, 1977, $5.00.

User Groups

All materials from REC are available upon written request. There is a charge only for publication.

REHABILITATION ENGINEERING CENTER
Smith-Kettlewell Institute of Visual Sciences
2232 Webster Street
San Francisco, California 94115

Dr. Lawrence A. Scadden, Director (415) 563-2323

Organization

The Rehabilitation Engineering Center at the Smith-Kettlewell Institute of Visual Sciences has as its primary objective the development and evaluation of sensory aids for blind and visually impaired individuals.

Major Activities

The activities conducted at Smith-Kettlewell are divided into four major categories: vocational rehabilitation engineering, independent orientation and mobility, low vision research, and evaluation of existing sensory aids. These activities can again be divided into the categories of basic research, applied research, and information dissemination.

Major Services

The staff at Smith-Kettlewell provides descriptions of the current state of the arts in sensory aids for the blind and visually impaired, information on new devices and their manufacture, descriptions of employment expansion through the use of sensory aids, and diagrams and schematic drawings for devices which are not currently manufactured. Information is also exchanged with scientific research groups indicating concepts and/or problem areas currently being addressed or under consideration.

User Groups

The Center's information is disseminated only through written correspondence and telephone communication with known professional colleagues.

REHABILITATION ENGINEERING CENTER FOR RESTORATION OF FUNCTION IN PATIENTS WITH MOBILITY DISORDERS
2119 Abington Road
Sears Tower EB65
Case Western Reserve University
Cleveland, Ohio 44106

Dr. Charles H. Herndon, Acting Director (216) 368-2960

Organization

The Rehabilitation Engineering Center at Case Western Reserve University was established in September 1977 for investigation of restoration of function in patients with mobility disorders. The designated core area of research in the Center is functional electrical stimulation in the upper extremity. Through these studies, new methods of patient rehabilitation will be developed by utilization of knowledge, methods and techniques developed by science, engineering and medicine.

Major Activities

The major emphasis of this Center is on the clinical development of methods and techniques that have been shown to have scientific and clinical feasibility. The Center provides the essential development steps that must be performed between the demonstration of a research hypothesis and the clinical deployment of an idea beyond the immediate confines of the research laboratory.

The core area of current research of the Center is functional electrical stimulation of paralyzed muscle. The primary emphasis of these studies is in clinical applications to the upper extremity. Projects in progress include the development of a system employing electrical stimulation to provide controlled prehension and release for the C5 quadriplegic patient, and determination of muscle function during tendon transfer surgery. Associated projects concern the development of a shoulder position transducer system suitable to supply

command signals for mobility and environmental control as well as for control of orthotic/prosthetic appliances. Studies to evaluate means of improving the control of involuntary muscle contractions through application of chronic electrical excitation are in early stages.

Major Services

The primary application of the present studies is in rehabilitation of the high level spinal cord injury patient. The developments presently in progress are applicable in addition for restoration of function in other disease categories, notably cerebral palsy and stroke.

Progress in the area of upper extremity functional electrical stimulation has resulted in the development of a small, portable stimulator to be used by high level spinal cord injury patients to provide controlled prehension and release.

Studies involving tendon transfer have yielded important information regarding some physiological properties of upper extremity musculature, providing the surgeon with means to assess intraoperatively the function of the transferred muscle.

A shoulder position transducer to provide command signal has been redesigned and developed, and the first unit is nearing completion. This transducer is designed to provide a proportional signal source for high level spinal cord injury patients. The first application of this controller will be in powered wheelchair control, and the interface electronics for this purpose is in the final stages of development. This system will be supplied to and evaluated by several C4 quadriplegics in the next year.

The protocol for the evaluation of the effects of electrical stimulation on involuntary muscle contractions has been established, with an emphasis on a complete evaluation of the alterations of gait that are caused by the stimulation of the peroneal nerve.

REHABILITATION FACILITY ADMINISTRATION TRAINING PROGRAM
School of Business
University of Northern Colorado
Greeley, Colorado 80639

James A. Bitter, Ed.D., Director (303) 351-2764

Organization

The primary purpose of this RSA-funded project is to offer an outreach oriented post-employment training program for practicing rehabilitation facility managers at the top, middle and first-line levels in Region VIII. Begun in September, 1978, the principal objective is that participants gain significantly in knowledge competencies and job performance as determined by pre- and post-training measures.

Major Activities and Services

Three training program options for employed facility managers are encompassed this project: short-term (two to five days) training courses in rehabilitation facility administration subject areas; an extended sequential certificate program of courses, and a post-employment experienced-based Master of Science in business administration with an emphasis in rehabilitation facility administration. In all three, the approach to curriculum is application-oriented. Concepts and techniques learned in the classroom are translated into practice through field assignments related to participants' jobs, and by involving rehabilitation facilities and staffs as educational co-partners in the training process as training sites and instructors.

The sponsoring unit for this project is the Department of Management in the School of Business at the University of Northern Colorado.

The Department of Social and Rehabilitation Services also has degree programs at all three levels and a Regional

Rehabilitation Continuing Education Program. There are eight rehabilitation faculty serving approximately 350 undergraduate and graduate students.

REHABILITATION INDICATORS (RI'S) PROJECT
New York University Medical Center
Institute for Rehabilitation Medicine
400 East 34th Street
New York, New York 10016

Co-Directors:
Leonard Diller (NYU Medical Center)
Wilbert Fordyce (University of Washington)
Durand Jacobs (California V.A. Hospital, Loma Linda)
Contact: Margaret Brown, Project Coordinator
(212) 679-3200

Organization

The RI Project was established to develop better measures of client outcomes, providing a method to enhance program evaluation and accountability within a broad range of rehabilitation systems. The present project goal is to develop a flexible generic tool (RI's) which can be used by and/or with rehabilitation clients to define benefits, outcomes, gains, goals, criteria, problems, etc.

The RI Project initiated activities in October 1974, with funding from RT-1 (NYU Medical Center). It is presently funded by an R & D Grant from the Rehabilitation Services Administration/DHEW to NYU Medical Center.

RI's are viewed as a language base for a rehabilitation information system; the language is focused on client functioning. RI's are descriptors of observable elements of the rehabilitation client's life space, covering a wide range of content (e.g. vocational, self-care, social, etc.), and are organized through two mechanisms: a taxonomy and a branching structure of general-to-specific descriptors. Four types of RI's have evolved: statuses, activities, skills and environmental elements. RI's are appropriate for use with (or by) clients/patients in a broad range of disability groups: physical, sensory, developmental and psychiatric.

Major Activities

The RI project is presently in the midst of the second phase of its activities. The first phase was devoted to basic development of RI's; to address this task, over 75 professionals and consumers from all parts of the country were organized into task forces to generate suggestions regarding the structure and content of RI's. During the present phase, some of the task forces continue to function, but the primary project emphasis is on field testing and final project development.

The third and final phase of the RI project will determine the subject of subsequent project proposal(s). The utility of RI's being used within several models needs to be demonstrated: in program evaluation, in individualized planning and/or within other potential models of use.

Major Services

RI's are not available presently for general dissemination. However, the project has available upon request, a *Project Overview* for those interested in a more comprehensive description of RI's. Also, *RI Update* will be mailed to requestors three to four times per year and will be used to make known the availability of RI's for dissemination to the field.

User Groups

Potential user groups include clients, administrators, evaluators, service providers (counselors, physicians, psychotherapists, workshop personnel, etc.), supervisors, planners, funding agencies, etc. The "user" will depend on the usage model. Costs have yet to be determined (planned for the next phase of the RI Project).

REHABILITATION INTERAGENCY LINKAGES
Regional Rehabilitation Research Institute
Center for Social Research and Development
Denver Research Institute
University of Denver
Denver, Colorado 80208

Edward C. Baumheier, Ph.D., Director (303) 753-3464
Henry H. Welch, Ph.D., Associate Director

Organization

A RSA-funded project, this RRRI concentrates on continued research in interagency linkages and use of similar benefits; technical assistance and technology transfer; creation of a resource center and data bank; and development and delivery of education and training service.

Major Activities and Services

The RRRI conducts site visits to collect data on innovative linkage mechanisms; conducts mail and phone surveys to develop a conceptual framework/matrix for developing linkage strategies for use of similar benefits; and collects data and materials for establishing a repository of information and training materials on interagency linkages, coordination and similar benefits. The RRRI staff also offers training and technical assistance for vocational rehabilitation agencies, utilizing its National Advisory Committee and an Advisory Subcommittee on RRRI Operations for policy direction, materials review and site visits.

REHABILITATION INTERNATIONAL INFORMATION SERVICES (RIIS)
432 Park Avenue South
New York, New York 10016

Barbara Duncan, Director of Information (212) 679-6520

Organization

The Rehabilitation International Information Service collects and stores in a retrievable manner literature from throughout the world on all aspects of disability prevention and rehabilitation. Its working languages are English, French and German, although the literature collection includes material in Italian, Swedish and Russian.

Major Activities

More than 500 periodicals dealing with disability are received by the Service, as are congress proceedings, books and reports from international organizations concerned with rehabilitation.

The Service issues international bibliographies, sends out quarterly mailings of selected publications, publishes a detailed acquisitions list and answers inquiries by correspondence.

Major Services

Special reference tools include Rehabilitation International's worldwide network of organizations and individuals involved in rehabilitation services at the international level and in more than 100 countries. The KWIK system is currently utilized for information transferral.

Selected international bibliographies have been composed since 1976 on the following topics: barrier free design,

transportation, recreation, sports and leisure activities, guidebooks for the disabled, supported living conditions, spina bifida and disability and the family. Additionally, seven European bibliographies have been assembled in the vocational rehabilitation field.

Periodicals of Rehabilitation International include:

The International Rehabilitation Review, a news publication produced quarterly in English and Japanese. Subscription available for US $10 a year.

The International Journal of Rehabilitation Research features original articles in English, French or German with extensive summaries in the other two languages; research news, international bibliographies of recent research oriented articles in other journals, a calendar of forthcoming international meetings in the field. Published quarterly, the *Journal* is available for $19 per year.

User Groups

Although the service was established primarily to assist member organizations of Rehabilitation International, it is open to anyone who addresses a specific inquiry to RIIS.

Membership is currently $20 per year, but there is a possibility of limitation of membership to by invitation only, due to increased costs.

REHABILITATION INTERNATIONAL U.S.A. (RIUSA)
20 West 40th Street
New York, New York 10018

Ellis Reida, Executive Director (212) 869-9907

Organization

Rehabilitation International U.S.A. (RIUSA) was incorporated as an independent non-profit voluntary agency in 1972 and is the U.S. affiliate of Rehabilitation International (RI), the only organization devoted to promoting all aspects of rehabilitation throughout the world. As the affiliate, RIUSA is mandated to disseminate international rehabilitation information and services to the U.S. rehabilitation community and to mobilize U.S. resources to support international rehabilitation service projects throughout the world. In addition, RIUSA is responsible for providing hospitality services (hotel reservations, itinerary planning, etc.) for rehabilitation officials visiting the U.S. and for coordinating U.S. representation and participation at RI meetings and conferences held periodically throughout the world.

RIUSA is financed by individual membership contributions, U.S. government grants, contributions from supporting U.S. national rehabilitation organizations, and private corporations and foundations. It is also responsible for funneling U.S. rehabilitation community support to Rehabilitation International.

RIUSA's policy and program direction are set by its board of directors, which meets quarterly. Program direction and financial support are also provided by its 14-member Council of Organizations, many of which are represented on the board. Council members include the American Cancer Society, Inc., American Foundation for the Blind, Inc., American Leprosy Missions, Association of Rehabilitation Facilities, Goodwill Industries of America Inc., National Association of Jewish Vocational Services, Muscular Dystrophy Associations, Inc., National

Council on Alcoholism, Inc., The National Eastern Seal Society for Crippled Children and Adults, The National Foundation, National Rehabilitation Association, United Cerebral Palsy Associations, Inc., and the World Rehabilitation Fund.

Major Activities and Services

Rehabilitation/WORLD, first published in 1975, is RIUSA's quarterly journal. It is the first publication aimed primarily at providing information of international developments in rehabilitation to the U.S. rehabilitation community. Regular features in the journal include reviews of films and books from overseas, career information for rehabilitation professionals, and an international calendar of upcoming conferences and trade shows.

The RIUSA film library brings the best rehabilitation films from overseas to the United States. To date, some 500 have been brought to this country for professional review and about 100 have been made available for rental through a widely distributed film catalogue. In addition to conducting RIUSA's annual rehabilitation film festival, the film library has conducted shows for various organizations and agencies in the U.S. and other countries.

RIUSA handles a great many individual inquiries from this country and abroad on a variety of rehabilitation questions, and as such, acts as a clearinghouse by answering some inquiries and referring others to more appropriate information sources.

Travel and the accessibility of public transportation to the disabled is a prime concern of RIUSA, as evidenced in two major areas of activity: the hospitality assistance to rehabilitation professionals (both able-bodied and disabled) visiting the U.S.; and a broad-based effort begun in 1977 to increase international travel by the handicapped, which has grown into "Access to the Sky," a project to promote accomodations for the disabled in commercial passenger aircraft.

As the Rehabilitation International affiliate, RIUSA coordinates U.S. participation in RI meetings and conferences by nominating representatives and delegates to RI's standing commissions which guide RI policy in six different areas of concern. Several RIUSA board members are officers of RI and sit on its governing council.

Publications and Services

RIUSA offers the following products and services (all prices, if any, are listed):

Rehabilitation/WORLD, RIUSA's quarterly journal, available as part of a basic $15 RIUSA membership, or through a $7.50 annual subscription; available outside the U.S. by subscription only: $10 surface, $15 air.

International Directory of Access Guides, available free of charge to the disabled and rehabilitation community, updated annually.

Directory of Organizations Interested in Hosting International Disabled Visitors, to become available in 1979 at no charge, with periodic updates.

International Rehabilitation Film Review Catalogue, circulated to over 5,000 organizations; available for $2.00 in U.S., Canada, Puerto Rico - $3.00 elsewhere; includes detailed reviews of available films and up-to-date information on rentals, sales, suppliers, etc.

REHABFILM Newsletter, available free on request to interested organizations; current circulation is 6,000 and growing.

International Rehabilitation Review, published periodically by Rehabilitation International; available in the U.S. as part of the basic $15 membership in RIUSA.

Film rental: RIUSA's collection of about 100 films is one of the largest in the world dealing with the handicapped; rental rates average $25.00 per showing in the U.S., Canada, and Puerto Rico.

Film sales: to date, eight leading international rehabilitation films are available for sale; prices range from $220 to $590.

Film shows and festivals: conducted by the Film Review Library for such varied organizations as President's Committee on Employment of the Handicapped, UNESCO, and the Department of Commerce.

Information Service: RIUSA receives and handles on an individual basis a variety of information requests from the general public.

User Groups

RIUSA membership is available for $15/year (tax deductable) to U.S. citizens; includes subscriptions in *Rehabilitation/WORLD* and the *International Rehabilitation Review*, as well as periodic updates on RIUSA meetings, activities and services.

REHABILITATION RESEARCH AND TRAINING CENTER NO. 4 (RT-4)
Baylor College of Medicine and The Institute for Rehabilitation and Research (TIRR)
Texas Medical Center
Houston, Texas 77030

W. A. Spencer, M.D., Director **(713) 797-1440**

Organization

The research programs of the RT-4 Center continue to be directed to the goal of generating needed knowledge of the causes, mechanisms, and consequences of disability and the means for providing the most attainable degree of enduring rehabilitation in the shortest period of institutional time for the greatest number of persons with severe physical impairments.

The RT-4 Center was established in November, 1962 and is funded by the Rehabilitation Services Administration (RSA), other federal agencies, and by private foundations.

Major Activities

The emphases of the Center's current research programs include spinal cord injury; independent living for severely handicapped individuals; behavioral ecology; cardiac rehabilitation; and clinical applications of biostereometrics.

The Center also facilitates the development of rehabilitation professional trainees, particularly in their relationships with disabled clients, and promotes policies, statutes and programs for the solution of the life adjustment problems of the disabled through community education.

Major Services

The Institute for Rehabilitation and Research (TIRR) is

the affiliated unit which serves the patients included in the Center's research and training programs. TIRR is a 106-bed special hospital that serves patients with severely disabling impairments.

All of the special services of a comprehensive rehabilitation facility are available to assist the disabled person to lead an active, productive, and satisfying life within his or her capabilities. Services available to patients include regular hospital and nursing care, complete vocational services, a driver education program, and a provision for special education for handicapped children. The requisite outpatient treatment programs involving 20 specialized clinics are available for those who can be treated without inpatient admission.

The Center has an Information Services Center at TIRR which consists of a collection of printed and audio-visual materials. Under the direction of an information scientist, the Information Services Center provides information to center staff, and on a selected basis, to non-center staff. A listing of video tapes produced by the Center is also available for loan or sale. The Center publishes a periodic newsletter, *Access*, which describes significant Center project and happenings. Persons wishing to receive this publication should write to the RT-4 Director of Training and request that their name be placed on the mailing list.

User Groups

All members of the rehabilitation community--consumers of services, practitioners, researchers or educators--are encouraged to contact the center for information being sought.

REHABILITATION RESEARCH AND TRAINING CENTER IN MENTAL RETARDATION
College of Education
Center on Human Development
212 Clinical Services Building
University of Oregon
Eugene, Oregon 97403

Andrew S. Halpern, Ph.D., Project Director
(503) 686-3585

Organization

The Oregon R-T Center opened in March, 1966. Its major sponsor programmatically and financially, is RSA.

Nationally, it is one of three Regional R-T Centers in Mental Retardation. The University of Wisconsin Center serves the midwestern states and Texas Tech University serves southern states. The University of Oregon Center is a resource to states in Region VIII (Colorado, Montana, Utah, Wyoming), Region IX (Arizona, California, Hawaii, Nevada), and Region X (Alaska, Idaho, Oregon, Washington).

Major Activities

Its activities are fourfold:

- To help prepare, through short-term training, professional and paraprofessional personnel who work in any area of rehabilitation and expect to work in the area of mental retardation.
- To carry out multidisciplinary research projects on the community and vocational adjustment of mentally retarded persons.
- To provide consultation on research and training to State rehabilitation and other related agencies on a regional basis.

- To deliver rehabilitation services to mentally retarded clients as part of, and in support of, Center research and training programs.

Major Services

The Center staff completed 59 research projects during the first 10 years of operation. Many of these projects have been interrelated and deal with content areas such as learning characteristics of the retarded; transaction analysis; transenvironmental programming; longitudinal program evaluations; evaluation of the Center's own short-term training activities; planning and evaluation strategies for state developmental disabilities councils; and evaluations of community residential facilities for developmentally disabled persons.

From March 1, 1966 through October 1, 1975 the Center's short-term training staff was responsible for 50 campus seminars and 50 field workshops. Overall, more than 4,000 rehabilitation workers who spend at least part of their energies with developmentally disabled persons have been trained in more than 35 different instructional programs. In addition, more than 27 doctoral level students in a wide variety of disciplines have taken a major part of their training at the Center.

To facilitate communication with human service practitioners working with handicapped persons in applied rehabilitation settings, the Center began its own in-house publication series in 1966. This consists of working papers, monographs, and audiovisual modules.

User Groups

Between 1968 and 1976 over 18,830 persons/organizations requested Center materials. Geographically, requests came from each of the 10 Federal HEW Regions as well as 26 foreign countries. The most frequent users of Center materials are first-line state practitioners employed in either rehabilitation or educational facilities.

REHABILITATION RESEARCH INSTITUTE
School of Education
University of Michigan
Ann Arbor, Michigan 48109

Don K. Harrison, Director (313) 764-5457

Organization

In response to the 1973 Rehabilitation Act, the University of Michigan established a Rehabilitation Research Institute (UM-RRI) in 1976, under funding of the Rehabilitation Services Administration. The mission of the UM-RRI is to conduct research in rehabilitation program evaluation and to disseminate the results of this research to strengthen the program evaluation capacity of state rehabilitation agencies.

Major Activities

Concerned as it is with program evaluation, UM-RRI is especially active in the compiling of handbooks, glossaries and compediums of program evaluation measures. It also conducts periodic research utilization conferences and reviews of program evaluation literature related to rehabilitation.

Major Services

Although its information retrieval is limited to that of its own products only, UM-RRI maintains a small on-site library available to other users.

Its recent publications include:

Rehabilitation Program Evaluation: Problems, Objectives, and Projects. Harrison, D., and Miller, J. V.

Program Evaluation Approaches for State Rehabilitation

Agencies: Current Status and Future Directions. Miller, J. V., Lee, C. C., Wargel, J., and Won, H.

An Integrative Approach for the Utilization of Rehabilitation Evaluation Data. Crystal, R. M.

Assessment and Analysis of Program Evaluation Needs in Vocational Rehabilitation Agencies and Facilities, Crystal, R. M.

Glossary of Program Evaluation Terms

Handbook of Program Evaluation Studies from State Rehabilitation Agencies. Miller, J. and Wargel, J.

User Groups

UM-RRI is targeted to program evaluation unit staff in state rehabilitation agencies. However, items are available to all interested persons on request.

Publications can be obtained without charge by sending written requests to UM-RRI.

RESEARCH AND EVALUATION BRIEFS
REHABILITATION RESEARCH INSTITUTE
Box J-155, J. Hillis Miller Health Center
University of Florida
Gainesville, Florida 32610

John E. Muthard, Ph.D., Head (904) 392-3001

Organization

The Research and Evaluation BRIEFs (Bring Research Into Effective Focus!) project was funded October 1, 1977, by the Rehabilitation Services Administration in order to bring results of rehabilitation research to practitioners. The BRIEFs summarize and highlight usable RSA research results and their implications for improving services to clients.

Major Activities

From October 1977 through September 1978, the Rehabilitation Research Institute prepared 15 REHAB BRIEFs for distribution to counselors, supervisors, administrators, educators, and students in rehabilitation. The Institute began a second year of BRIEFs production in October 1978, and will prepare 12 BRIEFs for the second contract year.

Major Services

While the Institute does not actively function as an information retrieval service, it does send out single or multiple copies of the BRIEFs while supplies last. Also available is the *Vocational Rehabilitation Index: 1974* and its supplement, the *Vocational Rehabilitation Index: 1977.*

BRIEFs are available on the following topics:

#1 Rehabilitation Needs and Alternatives for the Severely

Handicapped

#2 Who is Severely Handicapped?--The Need for a Workable Definition

#3 The Role of Sheltered Workshops in Vocational Rehabilitation

#4 Transitional Employment Enhances Job Placement for Epileptic Clients

#5 Choosing an Independent Lifestyle: Housing Alternatives for Severely Handicapped Persons

#6 SPIB--A Measure of Social and Prevocational Skills in Mentally Retarded Persons

#7 Affirmative Action for the Disabled Adds New Role for VR Professional

#8 Engineering Aids Reduce Barriers to Employment for Severely Handicapped Clients

#9 The Hurt That Doesn't Go Away--Treating Chronic Pain Through Behavior Modification

#10 Bringing Research Products and Program Innovations to Practitioners

#11 The Role of Telecommunications in Vocational Rehabilitation

#12 Teaching Placement Skills to Severely Disabled Clients

#13 Sex Counseling for Handicapped Persons--An Avenue to Intimacy

#14 The Family's Role in Rehabilitation

#15 Projects With Industry--A Powerful Placement Tool

User Groups

Anyone may request copies of the BRIEFs or either *Index*. There is a charge of $1.00 for each *Index*. There is no charge for BRIEFs.

RESEARCH UTILIZATION LABORATORY (RUL)
Woodrow Wilson Rehabilitation Center
Fishersville, Virginia 22939

Roberta R. Sadler, Ph.D., Director (703) 885-7281
Ext. 300

Organization

The RUL was established in October, 1976; major funding is provided through a grant from RSA. Three objectives have been set for its research:

- Demonstration of a model approach to research utilization through the operation of a research utilization laboratory emphasizing rehabilitation engineering and field test evaluation in a clinical setting of research products and developments.

- Dissemination of research developments with demonstrated significance for application to rehabilitation services.

- Facilitation of research utilization by the development of interactive communication between researchers and clinicians in the application of research findings to service delivery.

Major Activities

Ongoing programs at RUL include research utilization consultation (with different departments at Woodrow Wilson Rehabilitation Center), which incorporates the following areas:

Counseling: Vigorous Physical Exercise Program
Work Adjustment: IWAP (Individual Work Adjustment Plan)
Psychological Services: Therapeutic Outcome Measures (including AVICTORY evaluation) PAST (Personal Achievement Skills Training) evaluation with Work Adjustment

Physical Medicine: OT, PT, Speech functional measurements
Nursing: Relaxation Study
Brain Injury Project: Grant proposal, AVICTORY evaluation

Rehabilitation Engineering Services encompass such projects as:

Production of quadriplegic desk developed by University of Virginia
In-house consultation
Fabrication of devices
Dissemination of information on pertinent devices designed by Rehabilitation Engineering
Limited statewide consultation

Major Services

RUL edits a bi-monthly newsletter primarily for in-house (Woodrow Wilson Rehabilitation Center) circulation. The newsletter alerts staff to new projects being explored at RUL and also serves as a guide to resources outside the Center. RUL also holds bi-weekly open clinics for consultation and weekly open clinics for rehabilitation engineering consultation, in addition to seminars and discussion groups.

Future projects include investigation of possible expansion of rehabilitation engineering services to the Virginia Comprehensive Rehabilitation Services System Network; initiation of rehabilitation engineering efforts for customized patient support system; and the addition of staff with expertise in the areas of information gathering, compilation and dissemination.

User Groups

The Research Utilization Laboratory is primarily an in-house effort serving the Woodrow Wilson Rehabilitation Center. Expansion to include a state and regional focus is expected to evolve as the project matures. At the present time, there is no fee for service.

SPECIAL CENTERS
INFORMATION EXCHANGE PROGRAM
Arkansas Rehabilitation Research & Training Center
(ARR&TC) RT-13
Hot Springs Rehabilitation Center
P. O. Box 1358
Hot Springs, Arkansas 71901

Joseph Fenton, Ed.D., Executive Editor
Susan J. Sigman, Project Coordinator (501) 624-4411

Organization

Established in 1976 and funded by RSA, the Information Exchange Program promotes the inter-transfer of information concerning the activities of research and training centers, model spinal cord injury systems, regional rehabilitation research institutes, rehabilitation engineering centers, and the Helen Keller National Center for Deaf-Blind Youths and Adults, and to further disseminate this material among state agencies, regional offices, RSA special centers, consumers and other interested individuals and organizations.

To further the goal of information transfer, the following objectives form the foundation for all program activities: to keep the rehabilitation community abreast of the latest advancements in research and training; to promote the utilization of research finding; to prevent duplication of effort; to encourage joint planning and cooperation.

Major Activities

Program objectives are pursued through the publication of the *INFORMER*, a quarterly trade journal; the annual *Research Directory Of The Rehabilitation Research and Training Centers;* a tri-annual *Publications and Audiovisuals Aids Directory of the Rehabilitation Research and Training Centers,* with supplements annually; and the

Training Directory of the Rehabilitation Research and Training Centers, recently redesigned as the "RTC Training Calendar".

Major Services

The compedium of information resulting from this project serves to reduce the usual time lag between discovery of a problem, identification of the solution and the practical application of new knowledge.

Materials are developed and disseminated through the Information Exchange Program to enhance communication between special centers and all segments of the rehabilitation community, thereby promoting cooperation and collaboration in a wide area of expertise. They also are designed to encourage the use and practice of new technology among state agencies and practitioners, and to assist in overall program management through improved accountability and a reduction in duplication of effort.

User Groups

Products of the Information Exchange Program are disseminated without charge to consumers and consumer groups; libraries; university departments and professors; rehabilitation practitioners and allied health professionals; human resource organizations; local, state and national vocational rehabilitation agencies; and international recipients.

STATE OF THE ART SURVEY OF FUNCTIONAL LIMITATIONS PROJECT
Indices, Inc.
5827 Columbia Pike
Falls Church, VA 22041

Reese Robrahan, Executive Director (703) 931-9455

Organization

Indices is a private, non-profit corporation engaged in activities for improving the quality of life for handicapped individuals. Founded in 1972, the corporation is owned by the handicapped and is an advocate for the concerns of the disabled.

Major Activities and Services

The organization is currently working with RSA on a State of the Art Survey of Functional Limitations through a review of literature related to functional limitations, surveys of projects, and interviews with researchers to determine what is being done and what should be done in this area. The project staff will compile, analyze and categorize this information; conduct a conference for information dissemination; and produce monographs and conference proceedings for utilization of the results. The firm is also under contract with RSA for a study of job placement activities for partially sighted persons.

TELECOMMUNICATIONS FOR CONCERNED CITIZEN INVOLVEMENT

Department of Institutions, Social and Rehabilitative Services
Rehabilitative Services Division
P. O. Box 25352
Oklahoma City, Oklahoma 73125

Carroll Hostetter, Project Director (405) 521-3374

Organization

In September, 1977, the Rehabilitative and Visual Services Division of the Oklahoma Department of Institutions, Social and Rehabilitative Services received a three-year grant from RSA to develop, implement and test an approach to obtaining meaningful consumer involvement in vocational rehabilitation policy development. The project utilizes the statewide education "talkback television" system as a technique for maximizing the quality and coverage of consumer input and feedback.

Major Activities

Through implementation of the state's several educational television networks which are designed to permit multiple audio and video communications between studios, the Oklahoma Department of Institutions regularly assembles consumers and project personnel at some 16 educational television studios located throughout the state for concurrent dialogue, or "teleconferences". Additional consumer input is gathered through surveys and informal interviews.

Of specific concern to the study are consumer attitudes and the relative cost of consumer involvement in the use of telecommunications systems as a tool for obtaining consumer input.

Major Services

The conceptual model for consumer utilization and policy development as well as the policy study and consultation cycle developed through this project are expected to serve as a useful reference tools to other agencies. At present, the project offers consultation services, a consumer views newsletter, a directory of task force participants and a monograph, Telecommunications for Concerned Citizen Involvement: A Plan.

User Groups

The materials being developed from project activities may be utilized by any state, federal or local agency interested in maximizing the impact and effectiveness of consumer input. The project staff is interested in sharing information and findings with other agencies through correspondence and/or workshops and consultative services. The cost for effectively developing a consumer involvement program is being assessed and information regarding cost benefit effectiveness will be forthcoming in future monographs.

TEXAS TECH RESEARCH AND TRAINING CENTER IN MENTAL RETARDATION (RT-21)
Box 4510
Lubbock, Texas 79409

Gerard Bensberg, Ph.D., Director
Research (806) 742-3131
Training (806) 742-2970
Pauline Stevick, Information Specialist

Organization

The Research and Training Center in Mental Retardation gathers, develops, and disseminates knowledge concerning the rehabilitation of persons who are mentally retarded or have other developmental disabilities. The aim of its research is to maximize the independence of mentally retarded persons by finding ways to enhance their daily living and vocational skills. Center staff members also assist with the preservice and inservice training of rehabilitation personnel by teaching university courses, conducting workshops, developing training materials, and consulting with private, nonprofit or public agencies.

Established in 1971, RT-21 is funded through a core grant from RSA and by additional grants from other sources. The Center serves primarily the states in Federal Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas).

Major Activities

The R&T Center's four areas of emphasis reflect the priorities of agencies in Region VI and the expertise of the R&T Center staff: the work potential of mentally retarded persons; rehabilitation counseling and the service delivery system; community adjustment and training; and the multiply handicapped.

Research currently is being conducted in the following areas: work adjustment strategies for retarded sheltered workshop clients; cooperative work-study programs in the public schools; group homes for the mentally retarded; a follow-up study of students furloughed from state schools for the mentally retarded in Texas; consumer needs, circumstances, and attitudes; models of coordinating education and vocational rehabilitation; interview skills of the retarded; vocational handicaps as a function of IQ; and program evaluation for an extended rehabilitation system.

Major Services

The training mission of the R&T Center is divided into five major areas: preservice/university training; inservice/short-term training; consultation/technical assistance; materials development; and information dissemination. Current materials development projects include the preparation of a training package on strategies for working with the developmentally disabled client and the development of materials for training citizen and consumer advocates.

User Groups

Information is released through dissemination conferences, publication, and in-house reports and materials. The "Information and Resource Materials" booklet describes the objectives and functions of RT-21 and lists the services and materials available from the Center. This booklet is free upon request.

UNIVERSITY CENTER FOR INTERNATIONAL REHABILITATION
International Rehabilitation, Information, Research
and Dissemination Project
D-201 West Fee Hall
Michigan State University
East Lansing, Michigan 48824

Donald E. Galvin, Ph.D., Director (517) 355-1824
James J. Mullin, Information Coordinator

Organization

The project was established by RSA grant on July 1, 1976.

Major Activities

There are three primary functions of the University Center: information, research and training.

The program's resource room contains materials, both domestic and international, on a wide range of handicapping conditions and problems affecting the disabled, regardless of national boundaries. Information exchanges include both published documents and computerized data, including a Center newsletter published several times a year.

The research project investigates current knowledge in four content areas: vocational sufficiency; barrier removal, legislation and technology.

The training function focuses on the development and support of degree and non-degree programs in the U.S. and internationally. The program prepares individuals for leadership positions in research, administration or college teaching in rehabilitation or special education. Non-degree training is provided through conferences, seminars and mini-courses designed for individuals or small groups to accomplish specific program objectives.

Major Services

The Center expects to provide high quality information t rehabilitation counselors, adjustment specialists, teachers and occupational therapists, university researchers and trainers in working with severely disabled clients. One of the objectives of the Center, then, is the establishment of a networking system through which information can be exchanged relating to handicapped persons' needs and resources. The network consists of formal and informal relationships among domestic and international universities and agencies associated with rehabilitation and special education.

(The Center is presently participating in the Electronic Information Exchange System (EIES), using the computer facilities of the New Jersey Institute of Technology.)

UNIVERSITY OF CALIFORNIA CENTER ON DEAFNESS:
RESEARCH, TRAINING, AND MENTAL HEALTH SERVICES (RT-23)
1474 Fifth Avenue
San Francisco, California 94143

Hilde S. Schlesinger, M.D., Project Director
(415) 731-9150
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Organization

The University of California Center on Deafness (formerly Mental Health Services for the Deaf) is engaged in four main tasks related to deafness and mental health: direct mental health services to deaf people, their families, and agencies serving the deaf; research on deafness and mental health; advanced training in the mental health aspects of work with the deaf; and technical assistance to programs across the country requesting information and consultation in the area of deafness and mental health.

The Center's mental health services are provided under a contract with the State of California and range from crisis intervention to patient psychotherapy.

The Center's activities in the areas of research, training, and technical assistance are funded largely through RSA. The Center is the newest of the RSA research and training centers, and is the only such center focusing its efforts on deafness and mental health.

Major Activities

The UCCD research tasks include studies of: the vocational, social, and psychological adjustment of young adults; and the impact of advanced training in deafness and mental health on the skills of rehabilitation counselors and mental health professionals.

The first research task has already begun and preliminary data will be available in 1979; the second research task is an integral part of the training program and it will provide ongoing feedback to that program.

These research projects are expected to lead to:

- the identification of the individual psychological consequences (both emotional and cognitive-intellectual) of deafness and information about how they relate to vocational adjustment;

- the development of techniques which can be useful to improve the emotional adjustment and cognitive-intellectual skills of the deaf, thus improving their vocational and social adjustment;

- the identification of variables (especially environmental variables such as language teaching, school policy and placement, and attitudes of society, parents, support systems, and employers) which contribute toward problems in the vocational and social adjustment of the deaf;

- the application of this new knowledge to the practice of vocational rehabilitation counselors, mental health specialists, and policy-makers in the field of vocational rehabilitation of the deaf.

Major Services

In the area of training, UCCD has two pilot projects: the training of a small group of mental health professionals in the application of their expertise to the special population of the deaf; and the training of a small number of rehabilitation and school counselors already working with the deaf in mental health principles useful to them in their current work.

Additional training projects include: intensive, six-month training in mental health principles for rehabilitation and school counselors working with the deaf;

intensive, one-year training in deafness and mental health for mental health professionals who wish to expand their area of expertise to include the deaf; and a conference on deafness and mental health for representatives from the 15 centers offering mental health services to the deaf in the United States.

In the area of technical assistance, UCCD has published a wide variety of articles and one book--*Sound and Sign: Childhood Deafness and Mental Health,* by Hilde S. Schlesinger, M.D. and Kathryn P. Meadow, Ph.D.

User Groups

The Center is engaged in ongoing consultative work with agencies serving the deaf, and plans to increase its activities in this area. Persons and organizations may be placed in further contact with the Center through correspondence, voice telephone or TTY, as indicated above.

UNIVERSITY OF MICHIGAN REHABILITATION ENGINEERING CENTER
W. E. Lay Automotive Engineering Laboratory, Room 312
Mechanical Engineering Department
The University of Michigan
Ann Arbor, Michigan 48109

J. R. Pearson, Director (313) 764-1046
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Organization

In response to needs expressed at several national conferences in the early Seventies on devices and systems for handicapped drivers, a group of faculty and research personnel at the University of Michigan proposed the establishment of a Rehabilitation Engineering Center, with the research and development focus on assistive driving devices and systems for the disabled. The University of Michigan Rehabilitation Engineering Center (UM REC) commenced operation October 1, 1977, with funding from the RSA.

Major Activities

The focus of research, development and delivery activities at UM REC is on ways and means to enable persons with disabilities to drive their own personal vehicles. Investigations include physiological and psychological factors that affect driver performance; problems of the driver with hearing impairment; tests to measure and evaluate various perceptual handicaps that affect driver performance. Studies are being conducted to assess ranges of motion and strength as applied to the driver-site environment, and assistive driving devices and systems, such as controls and wheelchair restraints, are being developed. Equipment prescription specialists are being trained so that driver education can be carried out in communities where the driver candidate with a disability lives. A proposed project that

includes assessment, survey, and training activities is designed to facilitate accommodation of persons with physical handicaps in Michigan work places.

The Chrysler Corporation provided an Omni, a front wheel drive vehicle which is being modified to permit entry, egress and driver restraint that will enable a person to drive a compact car from a wheelchair. Test facilities to permit evaluation of devices designed within the group and elsewhere are being established. Plans are underway to measure and evaluate the driving performance of persons with disabilities by utilizing instrumented vehicles on standard driver training task routes.

User Groups

A source file of information on adaptive automotive equipment is maintained in cooperation with the University of Michigan Highway Safety Research Institute. Product information is not available at this time. Arrangements to use these materials can be made through UM REC. Charges for this service will be quoted on request.

An annual report is distributed without charge to other Centers and projects funded by the RSA.

Beginning in February 1979, a newsletter covering the activities of the UM REC will be published twice a year. It will be sent without charge to organizations and individuals interested in developments related to problems of the driver with a disability.

VETERANS ADMINISTRATION REHABILITATIVE ENGINEERING
REFERENCE COLLECTION (153D)
Office of Technology Transfer
252 Seventh Avenue
New York, New York 10001

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Organization

The primary mission of the Office of Technology Transfer is to expedite the transfer of research results into clinical practice, including the dissemination of information on new devices and techniques developed in the rehabilitative engineering program. One of the means used by OTT to achieve this goal is its reference collection that was begun more than 25 years ago by the Research and Development Division of the VA Prosthetics and Sensory Aids Service, Department of Medicine and Surgery, which in 1973 became the Research Center for Prosthetics, from which OTT recently evolved.

Major Activities

The collection includes both formal and informal publications, unpublished information, patents, reports of research projects, progress reports, and audio-visual materials. There is also an extensive collection of handout materials. Today OTT has possibly the largest collection of its kind in the world and it is still in the process of acquiring information and materials in the related fields. The present holdings include 2,500 books, 135 periodicals (including back issues of some journals since the collection was instituted), 900 technical reports to VA or other agencies, 12,500 reprints and copies of papers, 7,000 patents, 80 films and 22 videocassettes--all dealing with various aspects of the field of rehabilitative engineering.

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Major Services

The collection is valuable for both retrospective research and modern studies. This collection is used as a source of reference for a highly specialized clientele whose interests are in prosthetics, orthotics, spinal-cord-injury, automotive adaptive equipment, and sensory aids. The last category includes material concerning the hearing impaired and the deaf, the visually impaired and the blind, and, those with speech defects.

User Groups

This reference collection is available for use by all individuals in the medical or allied health and engineering professions, on the premises, through the mail, or by phone. Some materials may be borrowed (through interlibrary loan service to individual institutions and rehabilitation centers) for clinical research purposes. Photocopies of specific articles are provided on request for personal research and study. There is also a limited supply of pamphlets, booklets, reports, suggested references and various other types of materials: appropriate documents of specific interest are available free to visitors and are distributed at no cost to rehabilitation centers throughout the world in response to requests for information on clearly defined topics.

VIRGINIA DEPARTMENT OF VOCATIONAL REHABILITATION
REHABILITATION RESEARCH INFORMATION CENTER
4901 Fitzhugh Avenue
P. O. Box 11045
Richmond, Virginia 23230

Joyce Hawkins, Research Librarian (804) 257-0265

Organization

The information center provides a resource for all agency staff development functions and for program planning and evaluation activities. It provides a reservoir of research information in direct support of the agency research utilization program. It also provides rehabilitation literature for students and professional staff in other organizations related to vocational rehabilitation.

Major Activities

The basic holdings in the library are reports of rehabilitation research which has been conducted under contract from the federal government by private researchers, colleges and universities, and various research and training centers operated under the auspices of RSA. Other materials include books on a wide range of rehabilitation topics, monographs, microfiche, and abstracts of research reports.

Major Services

The selection and collection of library materials are related directly to those areas of vocational rehabilitation which are emphasized under current laws, regulations, and state plans that govern the vocational rehabilitation program conducted by the agency. The librarian reviews on a continuing basis for new materials or books to be added.

User Groups

The Linker is a monthly publication of the Information Center which advertises new books, articles, microfiche and other selected materials of interest to counselors and other professional and non-professional staff employed by the department or outside organizations.

The library can borrow materials from other local libraries as well as university and college libraries through inter-library loans.

WEST VIRGINIA RESEARCH AND TRAINING CENTER (WVRTC)
1223 Myers Avenue
Dunbar, West Virginia 25064

Joseph B. Moriarty, Director (304) 348-6340

Organization

The West Virginia Research and Training Center (WVRTC) was established in 1965. One of three vocationally oriented centers, it is supported by grants from RSA. The WVRTC works to improve the life quality of physically and mentally handicapped people through research in untapped areas of rehabilitation and the transmission of useable information to rehabilitation professionals and consumers. Its core areas are: program evaluation, consumerism and programmatic barriers to rehabilitation.

The WVRTC operates on a RDDU (Research, Development, Dissemination, and Utilization) model as a framework for its activities. R & T's research responds to the expressed concerns of rehabilitation practioners and consumer groups. The development stage works these findings into skills, techniques and publications for dissemination through training and publications. Utilization of the research findings is accomplished through technical assistance and individual problem solving, and by providing an opportunity for feedback.

The Research and Training Center's research staff is located at West Virginia University in Morgantown; the administration and training is conducted in Dunbar.

Major Activities

Ongoing research projects include: "Program Evaluation and Planning" attempts to improve rehabilitation service through the examination and improvement of the rehabilitation program itself. The Profile Analysis Technique

(PAT), developed through this project, enables agencies to accurately analyze their program, set standards and make valid comparisons both internally and externally.

"Analyzing Performance Competencies of Severely Handicapped Clients" is aimed at determining which skills are necessary for vocational success and developing systems for measuring those skills. The *Vocational Behavior Checklist*, an instrument for accurately measuring work-related skills, was developed under this project.

"Negative Incentives: Contingencies which Discourage Disabled Individuals from Seeking or Completing Rehabilitation Services and Subsequent Employment" examines the effects of transfer income on a handicapped person's rehabilitation program and employment.

"Development of a Valid Multiple-Factor Instrument to Assess Severity of Handicap" is developing a practical, cost-effective instrument to measure functional severity of handicap.

Major Services

The training section of the West Virginia Research and Training Center is responsible for the Development, Dissemination and Utilization phases of the RDDU model. Among its programs are:

"Research Utilization", which disseminates research findings through interaction among researchers and users.

"Program Evaluation" to teach program evaluation and other personnel techniques for programs, and the use of the Profile Analysis Technique (PAT).

"The Rehabilitation Process" focuses on various aspects of the rehabilitation process.

"Affirmative Action and Consumer Involvement" has developed a training program that can be tailored to specific

audiences as well as a variety of print and audio/visual materials on affirmative action for handicapped individuals.

"Institute on Rehabilitation Issues" is a cooperative effort among Rehabilitation Services Administration Central and Regional Offices, State Vocational Rehabilitation Agencies and Research and Training Centers which produces training documents in areas of concern in rehabilitation.

User Groups

The West Virginia Research and Training Center disseminates information through mailings to vocational rehabilitation and non-vocational rehabilitation audiences. A computer project, now in the development stage, would make national, regional and state data available to selected audiences. A publications cataglogue is maintained for responding to mail and telephone orders for publications and audio/visual materials which are available at cost.

APPENDICES

APPENDIX A

RESOLUTION

PASSED UNANIMOUSLY BY THE

REHABILITATION INFORMATION NETWORK CONFERENCE

participants

June 9, 1978

We, the participants at the Rehabilitation Information Network Conference of June 1978 strongly support the creation of an information network for the rehabilitation field. We believe that the quality of life for disabled individuals can be improved through provision of timely and effective information that can be used to enhance service delivery and management practice. The components exist now, but special effort is required to bring these persons and projects into synergistic functioning as a network. The Rehabilitation Services Administration should give priority concern to facilitating and supporting such a network as an adjunct to working toward a national rehabilitation policy and a comprehensive service delivery system.

A committee composed of network conference participants has been created to prepare for submission to RSA specific action-oriented recommendations following from this resolution.

APPENDIX B

REHABILITATION INFORMATION NETWORK CONFERENCE
Quality Inn - Pentagon City/Arlington, Virginia

June 8 and 9, 1978

Co-sponsored by: THE NATIONAL REHABILITATION INFORMATION CENTER and THE OHI CLEARINGHOUSE ON THE HANDICAPPED

AGENDA

Thursday, June 8, 1978 - Capital Ballroom/East

(7:30 - 8:25 Breakfast meeting of group leaders - Parlour B)

8:00 - 9:00 Registration (mezzanine)

9:00 Welcome - Helga Roth, OHI Clearinghouse On The Handicapped

9:15 Opening Address - Robert R. Humphreys, Commissioner, RSA

9:30 Purpose and Objectives of Conference
Judith J. Senkevitch
NARIC

9:45 - 10:15 Background on need for a rehabilitation information network

- RSA - Bertrum Griffis
- State VR Agency - Lois Byrum, Librarian Minnesota DVR

10:15-10:30 Coffee Break

10:30 - 11:45 Presentation and Discussion

- OHI Clearinghouse On The Handicapped
  Helga Roth
- NARIC - Elizabeth Stone
  Judith J. Senkevitch

11:45 - 1:00 Lunch (Capital Ballroom/East)

1:00 - 2:00 Definition and Explanation of "network" Elizabeth Pan

2:00 - 3:00 Working Groups on development of RSA/ RIN model, including:

- Objectives
- Functions
- Services

3:30 - 4:00 Synthesis of day's meeting - Thomas E. Backer

4:00 - 5:30 Social Hour (cash bar) - Parlour B

(5:30 - 6:30 Meeting of work group leaders to discuss conclusions and findings - Hospital Suite 1402)

Friday, June 9, 1978

8:30 Opening - Helga Roth, OHI Clearinghouse On The Handicapped

8:35 Reiteration of Work Group Objectives - Judith J. Senkevitch, NARIC

8:40 - 9:40 Summary and Discussion of working group findings to arrive at:

- consensus on goals and functions of (RSA) Rehabilitation Information Network
- prioritization of services

9:40 - 9:50 Coffee Break

9:50 - 10:50 Discussion of (RSA) network organizational structure, to arrive at

- criteria for inclusion
- structure of RSA/RIN
- selection of committees
- channels of communication

10:50 - 10:55 Break

11:00 - 12:00 Presentations on:

- Smith-Kettlewell Institute of Visual Sciences, San Francisco
  Lawrence Scadden
- R & T Information Projects, Arkansas R & T Center - David Sigman
- "New Options", Texas Institute for Rehabilitation and Research - Lex Frieden
- Rehabilitation Continuing Education Programs, Woodrow Wilson Rehabilitation Center, Virginia - Blake S. Clark

12:00 - 1:15 Lunch

1:15 - 2:30 Discussion of:

- Concerns
- Recommendations for the initiation of a broader rehabilitation information network (including both RSA and non-RSA funded units)
- Suggestions for additional network participants
- Potential date and location for next meeting

2:30 - 3:00 Review of findings, recommendations, and resolutions

3:00 - 3:30 Closing Summation

APPENDIX C

List of Conference Attendees

ATTENDEES

REHABILITATION INFORMATION NETWORK CONFERENCE

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June 8/9, 1978

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APPENDIX D

A Concept Paper--Spring 1978*

BEING DISABLED IN AMERICA: A short overview of the problems and needs of disabled citizens, and some approaches to solutions.

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TABLE OF CONTENTS

I. Introduction

II. Summary of Facts and Conclusions

III. Scope of the Problems: The Univers of Needs

IV. Pressures for Change

V. Proposed Structure for a Comprehensive Service System for Disabled Individuals

VI. The Legislative Agenda: Building Blocks for the Future Service Network

VII. Plans for the Future: A Tentative Agenda

I Introduction

Disabled individuals represent a sizeable minority of the Nation's total population. The needs of this population have been addressed in an ad hoc, piecemeal fashion, without an overall strategy, policy, or plan to use as the basis for service delivery to meet all or a large percentage of those needs. As a result there are huge service gaps and unmet needs, and there is no coordinated comprehensive network for the provision of services.

This paper does not purport to address all the needs of this important segment of our society, for they are many and complex. It does indicate, to the extent that such information is currently available, the scope of the problems and unmet needs. It strongly recommends some bold new approaches in legislation and administrative action that can bring more rationality, coherence, and efficiency to the Federal government's efforts to impact favorably on the lives of the handicapped citizens of this country, and begin to build the capacity for providing a nationwide service network for disabled people.

The immediate purpose of this paper is to provide justification for a series of major legislative initiatives and possible administrative changes.

II Summary of Facts and Conclusions

The population of chronically disabled people in America is estimated variously at 25 to 35 million, or between 10 to 15% of the total United States population. Of these, more than 10 million may be categorized as severely disabled.

Disability may be defined as an inability to perform some key life functions, as contrasted with an *impairment* (a residual limitation resulting from congenital defect, disease, or injury), or a *handicap* (environmentally imposed impediment to an individual's ability to work or travel).

The population with whom we associate the term disability include those who are mentally retarded, mentally ill,

and physically disabled. People in the latter category have wide and varying types of disability, including paraplegia, arthritis, sensory deficits (blind, deaf, deaf-blind), epilepsy, heart disease, cancer, stroke, amputations, multiple sclerosis, cerebral palsy, muscular dystrophy, osteogenesis imperfecta, spina bifida, cystic fibrosis, chronic respiratory dysfunction, and many others.

There is a total spectrum of disability levels. People with disabilities may live and function with relative ease and normality, or they may be homebound or institutionalized.

Service programs exist for the benefit of disabled individuals. Some of these, such as vocational rehabilitation and comprehensive medical rehabilitation centers, attempt to meet many of the needs through direct and indirect means. Other programs such as developmental disabilities, attempt to leverage a fairly broad range of services for a discrete segment of the disabled population. Others provide services for specific purposes but are not specific to disabled people. These include food stamps, income maintenance, and medical service programs, for example.

Community based services especially tailored to the needs of disabled individuals are badly needed, but are not widely available.

Comprehensive services to individuals who are severely disabled and do not have a vocational goal or anticipated vocational outcome, exist only in widely scattered demonstration programs.

There is no comprehensive program to provide employment for disabled people who wish to work. Training services and preparation for employment are provided, along with other specially tailored services, through vocational rehabilitation programs, but placement services are inadequate, and followup for job adjustment and satisfaction are almost nonexistent.

There is no nationwide network of comprehensive services

to meet the wide range of needs of all disabled citizens. Without such a network, these needs will not be fully met; deinstitutionalization cannot be accomplished on a large scale; services cannot be delivered with maximum efficiency, maximum effectiveness to disabled individuals, nor will the economic impact of providing services be reduced to the minimum.

We propose that planning be initiated for the construction of such a nationwide network of comprehensive services. A National Policy on Disability must be developed to eliminate conflicts in Federal programs and to coordinate policy and planning for those programs.

With the reorganization of the Office of Human Development Services and within it, the Rehabilitation Services Administration, a structural framework is established to begin to rationalize Federal programs for the disabled. RSA now includes the developmental disabilities program, will create an office of advocacy and coordination into which the Departmental coordinating unit, the Office for Handicapped Individuals will be placed. A broad new consumer oriented National Disabilities Advisory Council will be established, and a special unit to analyze and assess the cross-government recommendation of the White House Conference on Handicapped Individuals.

The proposals to amend and extend the Rehabilitation Act and the Developmental Disabilities Act will fill four major gaps in the provision of services to people with disabilities, and will build capacities in communities, States, and the Federal government for developing a comprehensive service network:

- Independent living rehabilitation services will be established, first on a limited scale through project grants, then comprehensively through a formula grant program.

- Community-based information and technical assistance centers will be established in each region to assist local government in meeting the needs of disabled residents.

- An expanded system of government-industry interaction to provide jobs to disabled people will be initiated, with national guidance and direction provided by RSA, which will plan and build a web of such interactions across the nation.

- States will be given an opportunity to develop a gatekeeping capacity to prevent inappropriate institutionalization, to remove individuals from institutions, and to improve those institutions which continue to be required.

- These legislative proposals are quite modest, and will not begin to meet the total need. They do represent a beginning, and a national commitment to provide a continuum of care for our disabled citizens. The network of services will be developed, through policy development, long range planning, and carefully monitored program expansion in future years.

III Scope of the Problem: The Universe of Needs

Although numerous Federal programs are designed to provide services to disabled people, and though many of these are eminently successful in addressing a portion of the total need, there is no overall direction and no plan to meet the complex and interrelated needs of the disabled person as a total individual.

Who are the disabled? How are they defined, and how many people can be characterized as disabled?

Total population figures on the disabled have never been compiled. Questions included in the 1970 U.S. Census have provided some answers, as have various demographic studies. But no fully reliable data base now exists.

- Projections based on a New York study indicate that there are over 2,000,000 severely disabled individuals who are *homebound*.

- About 24,000,000 Americans have arthritis, of of which some 5,000,000 are disabled, and of whom 475,000 are receiving Social Security Disability benefits.

- There are 250,000 to 500,000 adult Americans with multiple sclerosis.

- Some 13,000,000 Americans are hard of hearing, of which 1,800,000 are severely disabled by deafness, and of which an estimated 100,000 are low functioning deaf.

- Over 5,500,000 individuals are mentally retarded. Of those, about 3,500,000 are substantially handicapped by retardation.

- More than 4,000,000 Americans have epilepsy, and 1,400,000 of these are substantially handicapped by this condition.

- At least 2,000,000 adults with severe, persistent psychiatric disabilities reside in their communities.

The following chart provides an estimate of the severely disabled population in America*:

Age	Number
Under 18	180,000
18 - 64	4,200,000
65 and over	3,900,000
Institutionalized (all ages)	1,787,000
	10,067,000

The Urban Institute, in a study conducted pursuant to section 130 of the Rehabilitation Act of 1973 (entitled *Comprehensive Needs Study of Individuals with the Most Severe Handicaps*) alluded to the many definitions

*Source: Urban Institute, July 1975

in use to describe the population at risk. The study recommended that the term *impairment* be used to describe a residual limitation resulting from congenital defect, disease, or injury. *Disability* describes an inability to perform some key life functions. A *handicap* occurs when the environment imposes impediments to the individual's ability to travel or work.

Overall, the total population of disabled individuals in America has been variously estimated at 25,000,000 to 35,000,000, which figures include varying degrees of chronic disability. An accurate data base is essential to our efforts to design the scope of a service delivery system for this population.

There are many parallels between the conditions and attitudes faced by disabled Americans today and those confronting the racial minorities in the 1960s. Inability to obtain employment, public attitudes toward disability, poverty, inadequate health care, and other forms of discrimination are as relevant to disabled people now as they were to blacks in decades past. It is hardly necessary to note that discrimination against racial minorities continues, although dramatic advances have been made in recent years.

Some statistical information compiled by the Social Security Administration is useful in beginning to portray a profile of disability in America.

The following ratios apply to totally disabled individuals in relation to non-disabled individuals:

- Hospitalization (men) - 4 times as often as non-disabled
- Days hospitalized - 3 times longer than non-disabled
- Cost of medical care - 3 times higher than non-disabled
- Median cost of care as a percent of income - 5 times as high as non-disabled
- Average income - half that of non-disabled

There are other expenses faced by disabled people that the "able-bodied" do not have. An electric wheelchair costs some $3,000 to $4,000, with *annual* maintenance costs of $1,200 to $1,600 - more than most automobiles. Interpreters for the deaf, readers for the blind, attendants for severe paraplegics, home health care, all represent continuing expenses for disabled people.

Other data help to fill out this disparaging picture. Only 50% of totally disabled men and 60% of totally disabled women have health insurance protection, compared with 90% of those who are not disabled. Fully 3/8 of totally disabled people - 37.5% have incomes, earned and unearned, below the poverty level. *Seventy-six* percent of totally disabled men and 87% of totally disabled women are not in the labor force; only 12% and 2%, respectively, work full time.

Education and disability are also interrelated. *Nine* percent of totally disabled persons have attended college, as opposed to 30% of those who are not disabled, while fully 44% of the totally disabled have an elementary school education or less, and only 13% of the non-disabled are in this category.

Although rates of marriage are comparable for totally disabled and non-disabled persons, one who is totally disabled is twice as likely as his non-disabled counterpart to be divorced or separated.

This information assists us in recognizing the devastating impact of disability on the individual and his or her family. Without major efforts to improve services and coordinate them, it is unlikely that these sad statistics will change dramatically in the future.

IV Pressures for Change

Because of the recognition of the massive deficits in meeting the needs of disabled people, the Congress took some positive initial steps to correct past deficiencies

through enactment of Public Law 93-112, the Rehabilitation Act of 1973. Two earlier, more ambitious measures were vetoed by President Nixon.

Several of the provisions of that law became catalyst for change. Title V of the Rehabilitation Act contains four sections which are only now beginning to have nationwide impact. Section 501 requires affirmative action by the Federal government to hire, place, and advance in employment handicapped individuals. Section 502 established an Architectural and Transportation Barriers Compliance Board to monitor and enforce Federal agency and grantee adherence to standards established under the Architectural Barriers Act of 1968. Section 503 requires government contractors to have affirmative action programs to hire disabled individuals. Finally, section 504 prohibits discrimination solely on the basis of handicap by any individual or institution receiving Federal financial assistance.

With the 1974 amendments to the Rehabilitation Act came enabling legislation for the establishment of a White House Conference on Handicapped Individuals. That conference, held in May of 1977, attracted nationwide interest on the part of disabled individuals and generated the hope and expectation that government-Federal, State, and local - would become more responsive to their needs. Hundreds of recommendations for legislative and administrative change emanated from the White House Conference. Review and appropriate implementation of those recommendations are about to begin.

Public Law 94-142, the Education for All Handicapped Children Act requires that all handicapped children be provided a free, appropriate, public education. Deadlines for meeting this requirement are imposed.

These developments have generated new consumer involvement, advocacy, and even militancy. Public awareness of the needs of the disabled has been heightened. Citations are being issued by the Architectural and Transportation Barriers Compliance Board. A new

Administration committed to insuring the rights of handicapped Americans, has taken office. Deinstitutionalization of mentally retarded and mentally ill persons is under active review. Court decisions expanding the rights of institutionalized persons are being rendered.

Adding to the complexity and the challenge of these factors are advances in medical and biomedical knowledge and technology. Persons with congenital defects or traumatic injury or disabling diseases who would have died a generation or two ago, are through these advances being sustained. An increasing number of older persons, with attendant disabilities in many cases, including arthritis, renal disease, retinitis pigmentosa, and many others, are adding to the problem. Recreational accidents and disabling automobile and motorcycle accidents are increasing the number of persons with spinal cord injuries and traumatic brain damage. Cancer, stroke, and heart disease continue inexorably to add to the list of disabled individuals.

It is clear that the pressures for change in our way of dealing with the disabled are increasing. How can we begin to deal with those increasing pressures, which are in the final analysis, merely reflections of need?

V *Proposed Structure for a Comprehensive Service System for Disabled Individuals*

There is no system for the delivery of a continuum of services to disabled people in America.

There are scattered programs which, with varying levels of adequacy, address different needs of these individuals. Some of these are directed to the special needs of the disabled, such as rehabilitation services and SSDI. Others are not disability related, such as title XX and food stamps. Since there is no coherence, pattern, or plan relating to the provision of services the needs of the *whole individual* are nowhere considered, and as a result there are both major gaps in services and pervasive unmet needs.

In the absence of a comprehensive plan to meet those needs, it is a logical consequence that *capacity* is also lacking on the part of Federal, State, and local government, and in the private sector, to provide a full range of services to disabled individuals. In addition to the lack of capacity to meet needs, government and private funds have in past years been spent on facilities that are now perceived to be inappropriate. Other funds have been spent on services that are misdirected.

These deficiencies in policy, planning, services, and facilities all represent barriers to the full integration of the disabled into the mainstream of American society. Since these deficiencies have existed since the beginning of our nationhood, disabled individuals for the most part have been sheltered, and institutionalized. Because they are *different* from the able-bodied, they are all too often misunderstood and even feared.

Fear, misunderstanding, and a sheltered environment have resulted in a society that ignores the needs of this population. Barriers, not only physical but also attitudinal, are the legacy of these long generations of neglect.

The task for society, then, is to begin to correct these long standing inadequacies. *Our mission is to provide a conceptual framework for their correction through a planned, comprehensive network for service delivery,* and to begin to fill some of the gaps in services, service delivery capacity, and public awareness and attitudes.

The ideal structure for comprehensive service delivery would insure a continuum of service for all disabled individuals ranging from preconception through senescence.

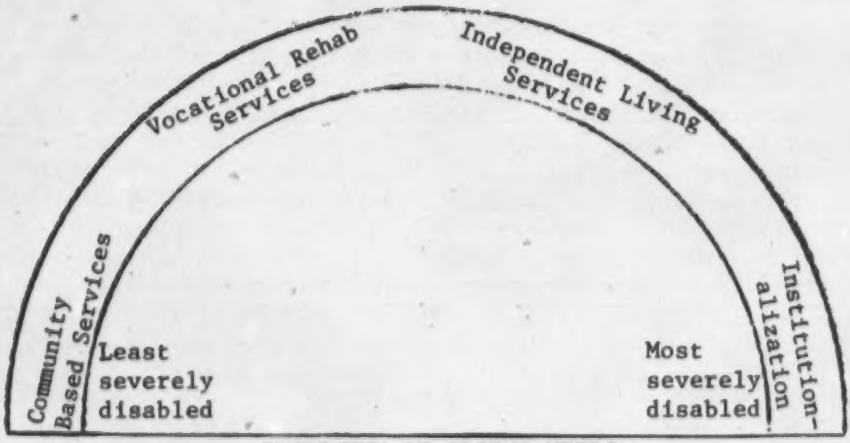
This implies the coordinated development of a capacity to provide five levels of care and service:

Prevention--Maintenance--Amelioration--Habilitation--
--Rehabilitation.

In order to insure continuity of services in a holistic framework it is necessary to provide a focal point in government to coordinate both the activities of service providers and the programs under which services are provided. As the principal Federal agency with responsibility for meeting many of the needs of people over a full range of disabilities and levels of disability for people of all ages, it is logical to place this coordinative responsiblity in the Rehabilitation Services Administration. As a point of departure, RSA should be given lead agency responsibility for the development of a national Federal policy on disability.

Pending the development of a national policy we can offer a conceptual framework for the building of a comprehensive service delivery network for people with disabilities.

Such a network would necessarily include (1) institutionalization for those who are so profoundly disabled that no alternative living arrangements are feasible, (2) independent living rehabilitation, including transitional living, congregate living, and halfway house accommodations, and a broad range of services to develop in disabled individuals who have no vocational goal the capacity to live independently and normally in their homes and communities, (3) vocational rehabilitation for persons, both severely and less severely disabled, who reasonably can be expected to develop vocational goals, (4) community-based services to insure that a continuum of services is available for all disabled people who are not in institutions. The level of services and the intensiveness of such services would depend on the needs of the individual. Many disabled people will need some services throughout their lifetime, which may not directly relate to the level of their disability. The following schematic portrays in broad terms the scope of this network:



CONTINUUM OF CLIENT NEEDS

It would be useful to indicate the range of services under these programs:

Community based services (all disability levels, all ages)

equal employment/affirmative action
architectural barrier removal
tax abatements/financial incentives
local information and referral, outreach
public health-prenatal, postpartum testing, immunization
integrative government/social service agency programs
technical assistance to school systems/ appropriate education assurance
transportation
recreation
public safety
public awareness and education

Vocational rehabilitation services (working age population, vocational goals)

counseling and guidance
evaluation of rehabilitation potential
provision of aids and devices
maintenance during rehabilitation
interpreter and reader services
vocational and other training services and materials
transportation related to vocational rehabilitation services
restoration services
extended evaluation
family services
placement and followup
recruitment and training services

Independent living services (severely disabled, no vocational goals)

attendant management, attendant care
mobility and transportation
home management, chore services
medical maintenance and self-care
transitional living arrangements
social skills and problem solving
financial management
recreation
peer counseling
sexual and personal adjustment

Institutions (all ages, most severely disabled)

activities of daily living
educational development
medical care, other life sustaining services
physical exercise
social development

Survey of services currently provided

What services are now being provided, and by whom? The vocational rehabilitation program has provided services

through a State agency system for many years. Rehabilitation counselors, employed by the State, secure education, training, work experience, diagnosis, evaluation and restoration services for their clients. Much of this is done through purchase of services from public and private rehabilitation facilities, manufacturers of aids and devices, physiatrists, psychologists, and businesses. Education and training and medical care can be coordinated through other programs, such as CETA, title XX, Medicare/Medicaid.

State developmental disabilities councils attempt to leverage and coordinate a wide range of resources for mentally retarded persons and those with cerebral palsy, epilepsy, and autism, without regard to age or employability.

Comprehensive medical rehabilitation centers provide rehabilitation services, primarily with a medical emphasis, to individuals outside the vocational rehabilitation system. These centers are located chiefly in hospital settings and may be supported through foundations, as publicly supported entities, or as private for profit or not for profit operations.

Institutions for mentally retarded, mentally ill, or profoundly physically handicapped individuals are provided by States, city or county resources, and other public and private for profit and not for profit agencies.

Community services and independent living services generally are not provided in a coordinated way. Larger cities may give attention to the specific needs of the disabled, and States have in a few cases established independent living services through vocational rehabilitation agencies with State funds.

The link between vocational rehabilitation services and employment for those who have been rehabilitated has not been addressed in a major way. Traditionally, vocational rehabilitation agencies have viewed their role as one of *preparation* of the individual for employment.

To create a nationwide network of comprehensive services to disabled individuals, mechanisms and delivery systems and coordination points must be established.

- For community-based services, capacity building will be accomplished through regional, intergovernmental resource centers which will provide technical assistance, guidance on integrative programming, model ordinances, public information materials. These centers will aid communities in their regions in developing community service mechanisms. Monitoring of center activities and accomplishments will be done through the Regional Offices of RSA.

- For independent living rehabilitation, grants will be provided to State vocational rehabilitation agencies, to community-based organizations, to private nonprofit and possibly profit-making organizations, and to consumer organizations and cooperatives. Coordination with vocational rehabilitation agencies will be effected to transfer to the vocational rehabilitation program individuals who develop vocational goals as a result of their independent living rehabilitation. Information and referral mechanism will be be expanded at the State and local levels. Guidance and monitoring will be done by RSA.

- The link between vocational rehabilitation and employment will be forged through a major new cooperative effort with business and industry. Vocational rehabilitation agencies will work on a continuing basis with industry councils in major cities and industrial areas to match jobs and vocational rehabilitation clients, including job modification by employers to accommodate individual needs. Field testing, marketing and distribution of new technology aids and devices will be developed through RSA. Cooperative commercial enterprises comprised of handicapped persons will be supported for the purpose of developing and marketing products and services.

- States will be given an opportunity to develop a gatekeeping capacity to prevent institutionalization

of individuals where such placement is inappropriate, to remove individuals from institutional settings, and to insure that for individuals for whom institutionalization is required, the best possible conditions are maintained.

- To insure that the rights of disabled individuals are safeguarded, and that voluntary compliance with laws protecting those rights is fully accomplished, technical assistance to States, government contractors, and recipients of Federal financial assistance will be provided. Protection and advocacy systems will be expanded in each State. Community-based offices will provide counseling to the disabled on their rights under law, and on means to break down barriers that confront them in the environment. A nationwide client assistance program will provide ombudsmen for insuring that vocational rehabilitation clients receive appropriate attention to their needs.

- To eliminate fear, mistrust and misunderstanding in the community so that attitudinal barriers and impediments to community support can be removed, community advocacy and information functions will be established through the regional centers described above. Public forums and discussions will be encouraged.

Conclusion.

Many additional challenges face our government and our society in the effort to provide full quality and equality of life for America's disabled people. Among these are full utilization of technology, medical and biomedical advances in disability prevention and restoration; creation of a coordinated, nationwide program of deinstitutionalization; providing the fullest educational opportunity for disabled children through a fully coordinated Head Start - special education - vocational education - vocational rehabilitation program.

It is clear that the legislative proposals we are presenting are modest but affirmative steps toward building a comprehensive service network for our disabled citizens. They are initial steps, but important ones, and they must be adopted if we are to realize our goal of filling the major gaps in services and the mechanisms to deliver them. The momentum for making truly great strides in bringing the disabled into the mainstream of America must not be lost.

VI The Legislative Agenda: Building Blocks for the Future Service Network

The basis for the development of the future service network is the existing Federal-State local structure and service delivery program now in place.

The authorities in both the Rehabilitation Act of 1973 and the Developmental Disabilities Act would be continued and improved in order to maintain and enhance vital services now being delivered to disabled people.

We propose the following immediate action to build on present programs:

Rehabilitation Act Modification - 3-Year Extension

	FY79	FY80	FY81
Basic State Grants	$810M	$860M	$910M
Innovation and Expansion	19.5 (each year)		
Research and Evaluation	31.5 (each year)		
Training	45.2 (30.5 for the next 2 yrs.)		
Office of Handicapped Individuals	.74 (each year)		
Architectural and Transportation Barriers Compliance Board	1.031 (each year)		

Independent Living Rehabilitation Grants

	FY79	FY80	FY81
Special Project Authority To lay groundwork for an extended program (see high priority initiatives for alternative).	$10M	$20M	$30M

Civil Rights Technical Assistance Grants

	FY79	FY80	FY81
Special Project Authority	$5 M	$5 M	$5 M

Miscellaneous Amendments

Remove numerical limitations on client assistance projects

Establish project grant authority for Pacific Basin grants

Increase minimum State allotments

State grants for White House Conference follow-up

Establishment of National Disabilities Advisory Council Developmental Disabilities Act Modifications - 2-Year Extension

	FY79	FY80
Basic State Grants	$47.0	Such sums as necessary
Demonstration & Training--UAF	6.5	
Special Projects	5.	
Protection and Advocacy	3.5	
UAF construction		Such sums as necessary

We propose, in addition, the following New Initiatives Package: Quality of Life Improvement for Severely Disabled Individuals

A nationwide project grant program to provide comprehensive range of services to promote their independent living and prevent or delay institutionalization: FY-1980, $40 M; FY-1981, $60 M; and FY-1982, $80 M.

Employment and Training Program for Disabled Citizens

An enhanced program of Projects With Industry (placement, job matching, job modification)

Job Development Advisory Teams

Commission on Job Development for Handicapped Individuals (Labor, Commerce, and HEW)

Pilot Program of Wage Supplements

Project Grants to Establish Cooperative Commercial Enterprises

Development, Production, Field Testing and Marketing of Aids and Devices

Training Grants for Job Development and Placement Specialists

Community Assistance to Disabled Citizens

A nationwide project grant program for cities, towns, and counties to assist those governmental units to aid their disabled residents: FY-1980, $25 M; FY-1981, $25 M; and FY-1982, $25 M.

Programs under these authorities would be developed in cooperation with other human services and education programs in the Department, employment and training programs in the Labor Department and the housing and community development programs at HUD.

Other legislative initiatives in 1980 and 1981 would stem from the new directions outlined in the Overview Paper and the Implementation Plan of the White House Conference on Handicapped Individuals.

VI. A. Proposed Budget for the Legislative Package

Increments to FY'79 President's Budget
(Dollars in millions)

	Fiscal Year 1979	1980	1981	1982	1983	1984
a) *Modifications to Existing Rehabilitation Act*						
(i) Basic State Grants	$ 25	$ 75	$125	$215	$315	$415
(ii) Independent Living Demonstration Grants	10	20	30	30	20	10
(iii) Title V Technical Assistance	5	5	5	--	--	--
Budget Increments for Modifications only	40	100	160	245	335	425

b) *New Initiatives Package*

(i) Quality of Life Improvement	$ 40	$ 60	$ 80	$160	$240	$320
(ii) Community Assistance	25	25	25	25	25	--
(iii) Employment and Training Program	31	59	90	90	70	39
	96	144	195	275	335	359
Increment to Basic State Grants as in a) above	25	75	125	215	315	415
Budget Increments for New Initiative Package plus Realistic Increase in Basic State Grants	121	219	320	490	650	774

Budgetary Implications of Legislative Proposals

Administration for Handicapped Individuals (RSA)

Rehabilitation Services and Facilities

a)	FY 1979 Budget	$ 912	$ 912	$ 912	$ 912	$ 912	$ 912
	Modification Package	40	100	160	245	335	425
	Total	952	1,012	1,072	1,157	1,247	1,337
b)	FY 1979 Budget	912	912	912	912	912	912
	New Initiatives Package	121	219	320	490	650	774
	Total	1,033	1,131	1,232	1,402	1,562	1,686
	Developmental Disabilities						
	FY 1979 Budget	62	62	62	62	62	62
	New Initiative	45	45	45	--	--	--
	Total	107	107	107	62	62	62

VII. Plans for the Future: A Tentative Agenda

As indicated earlier in this paper, the design of a panoply of new approaches to address the comprehensive needs of the disabled in our society must await the development of a national, coordinated policy. Further, with respect to additional major program initiatives for the Rehabilitation Services Administration, the creation of a policy development, analysis, and long range planning capacity will greatly improve our ability to recommend new directions.

Tentatively, however, we are looking toward implementation of new concepts in a number of areas. Three of those have been presented to the Secretary as major legislative initiatives--an independent living rehabilitation program, an accelerated employment and training program, and a community assistance and public awareness program. The authorization levels for these three proposals total $96 million. That modest funding level will not, of course, take care of all the needs. But it will make a difference to thousands of disabled people, and the amount expended will be returned manyfold in terms of cold economic justification. There is no way to place a quantifiable value on improved quality of life, improved self-image, social acceptance, or job satisfaction.

Some additional new directions we will be exploring include:

- Working toward a fully coordinated Head Start - special education - vocational education - vocational rehabilitation program, nationwide.

- Undertaking a comprehensive national survey of disability and service needs, with consequent development of a national data system on disability.

- Mounting a major outreach and referral program with respect to disabled individuals who are most egregiously underserved--those with multiple handicaps of physical or mental disability combined with

cultural and economic deprivation.

- Creating a coordinated program of deinstitutionalization involving transitional living, group homes, and habilitation and rehabilitation services.

- Eliminating disincentives to rehabilitation, including the retention of Medicare/Medicaid benefits and food stamps after employment.

- Supporting legal assistance centers for the disabled to protect their rights under title V of the Rehabilitation Act.

- Establishing a nationwide system of client assistance programs so that, through ombudsmen, disabled individuals will be able to "fight the system" to obtain the fullest possible service benefits.

- Demonstrating new approaches to meeting the transportation and residential needs of disabled people.

- Initiating a cooperative research effort in central nervous system (spinal cord) regeneration, and in areas of disability prevention, amelioration, and treatment.

- Adopting a new focus for international rehabilitation interchanges to take advantage of technological and service delivery innovations of developed nations.

- Exploring ways to meet the need for new or renovated rehabilitation facilities and physical improvements in institutions which house physically and mentally disabled people.

These are exciting times for disabled Americans because the potential exists for dramatic breakthroughs in their well-being. We must have the will and the determination to see to it that being disabled in America is not a continuation of that which has gone on before. We must, as a government, reinforce our commitment to

meet head-on one of the major challenges of our day--bringing into the mainstream of American society a vulnerable and precious human resource--the millions of disabled citizens in our land.

INDEX

TO

III. PROGRAM DESCRIPTIONS

OF

Rehabilitation Information Resources

pp. 89-202

INDEX

Abbott-Northwestern Hospitals, 122
Adjustment to disability, 171
Administration--training, 111, 119, 126, 137, 139, 151, 160
Advocacy--consumer, 91, 187, 200, 202
Aerospace technology, 115
Affirmative Action, 144, 177, 200, 202
Air travel, 167
Akabas, Shiela H., 144
American Coalition of Citizens with Disabilities, 91
Aphasia, 101
Architectural barriers, 165, 184, 189
Attitudes toward handicapped, 134, 144, 148, 191
Audiovisual materials, 114, 120, 126, 143, 167, 169, 182
Automotive adaptive equipment, 154, 194, 196
Autry, L. H., 151
Barrier-free design, 165
Barrier removal, 148, 165, 184, 189
Barrier to employment, 134, 144, 177, 192
Bartels, Elmer C., 117
Baumheier, Edward C., 164
Baylor College of Medicine, 171
Behavioral ecology, 171
Bensberg, Gerard, 187
Berenberg, William, 105
Bibliographies, 109, 120, 123, 126, 147, 148, 165, 169
Bibliographies--attitudes, 148
Bibliographies--independent living, 113
Bibliographies--international, 165
Bibliographies--research, 123
Biofeedback, 143
Bionomic adaptation, 123
Biostereometrics, 171
Bitter, James A., 160
Blindness, see Visual impairment and blindness
Bowe, Frank G., 91
Boating, 108
Bohls, Frederick O., 115
Brain injury, 101, 180

Brown, Margaret, 162
Buses--accessibility, 101, 167
Business management, 111, 160
Cancer, 167
Cardiac rehabilitation, 101, 123, 171
Caribbean nations, 132
Case Western Reserve University, 158
Caseload management, 141
Catholic University of America, 126
Cerebral injury, 101
Cerebral palsy, 105, 158
Cerebrospinal fluid dynamics, 105
Children and youth, 107, 191
Children--cerebral palsy, 105
Children's Hospital Medical Center, Boston, 105
Civil rights--handicapped, 91, 148
Clark, Blake S., 141
Clerical employees--training, 141
Client evaluation, 96, 100, 162, 180
Client evaluation--mentally retarded, 177, 187
Client evaluaiton--severely handicapped, 200
Client evaluation--vocational, 107, 119, 187, 200
Coissart, Jolan, 194
Cole, Jean, 112
Colorado Department of Social Services, 96
Columbia University School of Social Work, 144
Communication--deaf, 98
Communication--disorders, 102
Communication--research, 98
Community education, 171
Community development--barrier-free, 184
Community development--deaf, 98
Community development--planning, 101
Community development--resources, 144
Connolly, Sean G., 136
Consumer advocacy, 91, 187, 200, 202
Continuing education, 92, 137
Cornelius, Debra, 148
Counseling--rehabilitation, 187
Counseling--training, 122, 125, 130, 136, 139, 141, 177
Crisis intervention, 191
Crisis management, 136
Deaf-blind, 182
Deafness and hearing impairment, see Hearing impairment and deafness

Dellario, D. J., 130
Department of Health, Education and Welfare, 94
Developmental disabilities, 187
Devices--automotive, 154, 194, 196
Devices--controllable, 158
Devices--design, 105, 115, 156, 180
Devices--electronic, 143
Devices--evaluation, 105
Devices--fabrication, 180
Devices--hearing impairment, 194
Devices--medical, 143
Devices--quadriplegia, 180
Devices--sensory feedback, 105
Devices, spinal cord injuries, 158
Devices--work-related, 115
Diagnostic examinations, 96
Diller, Leonard, 162
Directories, 144, 182
Directories--facilities, 94
Directories--independent living, 113
Directories--research centers, 182
Disability and the family, 165
Disability claims, 144
Disabled and handicapped--advocacy, 91
Disabled and handicapped--civil rights, 91, 144, 148
Disabled and handicapped--discrimination, 144, 148
Disabled and handicapped--surveys, 98
Discrimination, 144, 148
Dixon, Gregory L., 132
Drexel University, 154
Driving--devices, 154, 194, 196
Driving--disabled, 107, 171, 194
Driving potential--evaluation, 107, 194
Driving potential--hearing impairment, 194, 222
Duncan, Barbara, 165
Drug abuse, 132
Early intervention, 144
Economics, 109
Education, 91
Education--public, 94
Educational television, 185
Electrical stimulation, 158
Emory University School of Medicine, 143
Emotion--brain injury, 101

Employment of the Handicapped, President's Committee on, 134
Employment rights, 134, 148
End stage renal disease, 101
Epilepsy--employment, 177
Ergonomics, 123
Evaluation--client, 96, 100, 107, 119, 123, 177, 180, 187, 200
Evaluation--program, 109, 175
Exercise, 180
Exercise--post-coronary, 102
Facilities--construction, 96
Facilities--management, 119, 126, 151, 160
Facilities--planning, 140
Family--counseling, 101
Family-hearing impairment, 191
Family--research, 101
Family--role in rehabilitation, 177
Fenton, Joseph, 182
Fondyce, Leonard, 162
Frieden, Lex, 112
Function assessment evaluation, 123
Gaines, Paul, 125
Gait analysis, 105, 154
Galvin, Donald E., 189
George Washington University, 101, 148
Georgia Department of Human Resources, 103
Georgia State University, 137
Gonnella, Carmella, 143
Greenberg, Lenore, 108
Halpern, Andrew S., 173
Harvard Medical School, 105
Hand controls--automotive, 194
Hansen's disease, 167
Harrison, Don K., 175
Hawkins, Joyce, 198
Health care delivery, 194
Hearing impairment and deafness--conferences, 141
Hearing impairment and deafness--community development, 98
Hearing impairment and deafness--deaf-blind, 182
Hearing impairment and deafness--driving, 194
Hearing impairment and deafness--mental health, 191
Hearing impairment and deafness--population surveys, 98
Hearing impairment and deafness--training, 98, 141

Heart defects, 101, 123, 171
Helen Keller National Center for Deaf-Blind Children and Adults, 182
Herndon, Charles H., 158
Hines, Gary E., 92
Holt, June C., 117
Hom, Lily W., 196
Hostetter, Carol, 185
Housing--disabled, 91, 177
Housing--mentally retarded, 173
Housing--severely disabled, 177
Human engineering, 102
ICD Rehabilitation and Research Center, 109
Independent Living, 100, 112, 122, 171, 177, 184, 187
Independent Living--mental retardation, 173, 187
Independent Living--severely disabled, 177
Indiana Rehabilitation Services, 114
Indices, Inc., 184
Industrial social work, 144
Information services--international, 132
In-service training, 92, 136, 139, 141, 160
Institute for Information Studies, 100
Insurance--health, 100, 144
International organizations, 132, 165, 167, 189, 217
Interview procedures, 136
Job development, 101, 184
Job restructuring, 177
Job seeking behavior, 144
Kidney disorders, 101
Kottke, Frederic J., 122
Labor-management collaboration, 144
Labor unions, 144
Latin American nations, 132
Learning disabilities, 102
Learning--mental retardation, 173
Legal rights, 91, 148
Legal rights--employment, 148
Legislation, 189
Libraries, 103, 109, 114, 117, 120, 126, 129, 139, 167, 196, 198
Libraries--audiovisual, 120, 167
Litvin, Mark, 96
Low vision research, 157
Locomotion, 154
Luck, Richard S., 139

Mainstreaming, 91
Management--planning, 139
Management--training, 111, 119, 126, 137, 139, 151, 160
Marketing and distribution, 100
Massachusetts Institute of Technology, 105
Martin, Jean S., 139
McFarland, Sharon D., 126
Medical services, 96
Mental health--deafness, 191
Mental illness--employment, 144
Mental retardation, 132, 173, 187, 200
Mental retardation--attitudes toward, 148
Mental retardation--independent Living, 173, 187
Mental retardation--research, 173, 187
Mental retardation--work potential, 187
Michigan State University, 189
Mobility disorders, 154, 158
Molinaro, David, 107
Moriarty, Joseph B., 200
Moss Rehabilitation Hospital, 154
Multi Resource Centers, Inc., 92
Multiple handicaps, 187
Murphy, Eugene, 196
Murphy-Hazzard, Peggy, 130
Muscle function, 158
Muscular dystrophy, 167
Musculoskeletan disorders, 154, 158
Muthard, John E., 177
Myoelectric analysis, 105
Najar, Elizabeth, 114
National health insurance, 100
New York University, 98
New York University Medical Center, 162
Neuromuscular control, 105
Neuromuscular disorders, 123, 143
Nursing, 180
Occupational therapy, 122
Office of Information and Resources for the Handicapped (OIRH), 94
Office management, 129
Oklahoma Department of Institutions, 185
Oklahoma State University, 125
Orthotics, 196
Pain, 177

Pan, Elizabeth, 100
Paralysis, 158
Paraprofessionals, 141, 173
Partners of the Americas, 132
Pearson, J. R., 194
Perceptual handicaps, 194
Performance--evaluation, 101
Personnel research, 98
Personnel training, 92, 96, 101, 119, 122, 137, 177, 189, 200
Personnel training--clerical, 141
Personnel training--deafness, 98
Personnel training--management and administration, 111, 119, 126, 137, 139, 151, 160
Personnel training--materials, 119, 125, 130
Personnel training--mental retardation, 187
Personnel training--rehabilitation engineering, 105
Placement, 96, 101, 184, 177
Placement--epilepsy, 177
Placement--follow up, 96
Placement--mental retardation, 177
Placement--models, 101
Planning--community, 92
President's Committee on the Employment of the Handicapped, 134
Program evaluation, 109, 175
Prostheses, 96, 115, 196
Prostheses--controllable, 158
Psychiatry--training, 122
Psychiatry--treatment, 96, 191
Psychological aspects of disability, 109, 122, 136
Psychological testing, 136, 187
Psychotherapy--hearing impairment, 191
Public information, 94, 134
Public relations, 126
Quadriplegia, 158
Quadriplegia--defices, 180
Ramey, Mae, 129
Recreation, 148, 165
Recreation--boating, 107
Rehabilitation Act of 1973, 134, 148
Rehabilitation education, 92, 123, 152
Rehabilitation engineering, 105, 115, 154, 156, 158, 177, 180, 189, 196

Rehabilitation Engineering Center, Boston, 105
Rehabilitation Indicators (RI), 162
Reida, Ellis, 167
Renal disease, 101
Research utilization and dissemination, 100, 164, 180, 184
Research Utilization Laboratory, 109
Right cerebral hemisphere damage, 101
Robinault, Isabel P., 109
Robrahn, Reese, 184
Roth, Helga, 94
Sadler, Roberta R., 180
Scadden, Lawrence A., 156
Schein, Jerome D., 98
Schlesinger, Hilde S., 191
School placement--hearing impairment, 191
Self-help groups, 144
Senkevitch, Judith J., 126
Sensory feedback devices, 105
Service delivery, 96, 103, 187
Service delivery--deafness, 98
Service delivery--models, 98
Severely disabled, 171, 189
Severely disabled--evaluation, 200
Severely disabled--independent living, 107, 177
Severely disabled--job preparation, 107
Severely disabled--job seeking behavior, 144
Severely disabled--youth, 107
Sexual problems, 148
Sexual problems--counseling, 177
Sheltered workshops, 100, 177, 187
Sigman, Susan J., 182
Sign Language, 99, 191
Sign Language--Spanish, 99
Sister Kennedy Institute, 122
Smith-Kettlewell Institute of Visual Sciences, 156
Social work--industrial, 144
Sociology, 109
Special education, 132, 171, 189
Speech defects, 196
Speech defects--evaluation, 180
Speech therapy, 122
Spencer, W. A., 171
Spina bifida, 165
Spinal cord injury, 123, 158, 171, 182, 196

Sports, 165
Staff development, 92, 98, 126, 141
Stafford, Patsy, 125
State agencies, 92
State agencies--program evaluation, 175
State agencies--training, 92, 137
State plans, 109, 198
Statistics, 109
Stephens, James E., 137
Stevick, Pauline, 187
Stroke, 101, 158
Strully, Jeffrey, 148
Success of rehabilitation, 162, 180
Success of rehabilitation--measurement, 100
Supervisory training, 137, 139
Tamagna, Irene G., 101
Technology transfer, 115, 164, 189, 196
Telecommunications, 177, 185
Temple University, 154
Tendon transfer, 158
Texas Institute for Rehabilitation Research, 112
Texas Medical Center, 171
Texas Rehabilitation Commission, 115
Training, in-service, see Personnel training
Training materials, 119, 125, 130
Training--needs assessment, 137, 142
Transactional analysis, 173
Transducer systems, 158
Transportation, 91, 101, 165, 167
University of California, 191
University of Denver, 164
University of Florida, 177
University of Hawaii, 130
University of Michigan, 175, 194
University of Minnesota Hospitals, 122
University of Northern Colorado, 160
University of Oklahoma, 151
University of Oregon, 173
University of Texas Health Science Center, 136
University of Wisconsin, 119
Virginia Commonwealth University, 139
Virginia Department of Rehabilitation Services, 141
Viscardi, Henry, 107
Visual impairment, 196
Visual impairment--devices, 156

Visual impairment--low impairment, 103
Visual impairment--mental health, 191
Visual impairment--placement, 184
Visual impairment--sensory aids, 156
Vocational adjustment, 119, 189
Vocational adjustment--deaf, 191
Vocational adjustment--mental retardation, 173
Vocational capacity scale, 198
Vocational evaluation, 96, 107, 119, 189, 198
Vocational evaluation--mental retardation, 173, 187
Vocational evaluation--training, 119
Vocational counseling, 96
Volin, Larry K., 134
Volunteers, 132
Weisinger, Marvin, 109
Welch, Henry H., 164
Wells, Gerald K., 141
West Virginia University, 200
Wheelchairs, 148, 154, 158
Wheelchairs--automotive adapted, 194
Wheelchairs--powered, 158
White House Conference on Handicapped Individuals, 94
Wilson, A. Bennett, 154
Woodrow Wilson Rehabilitation Center, 141, 180
Work adjustment, 119, 173, 177, 180, 189, 191
Work attitude, 144
Work potential--evaluation, 107, 119, 189
Work potential--mental retardation, 173, 187
Work sample manuals, 119
Youth--disabled, 107, 191